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School of Business

Description of Management Control Practices in 10 countries

A Quantitative Analysis

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Abstract

This study presents a quantitative analysis on the management control practices of organizations from ten countries. In addition to the description of the practices, there are two more research objectives. Firstly, it is explored whether the practices of organizations from different countries differ on a statistically significant level. Secondly, statistically significant differences in the practices between small and large organizations within the countries are examined.

The theoretical background of this study rests upon management control system research as well as studies investigating cross-national differences in management practices. The data subject to analysis is part of international research project called Effective Management and Control Systems. Statistical method utilized is one-way analysis of variance.

In addition to the accurate description of the management control practices, there are two main findings. First of all, the practices of organizations from different countries differ remarkably. A number of statistically significant differences could be found within all elements of the MCSP typology. Secondly, the number of statistically significant differences in the practices between small and large organizations, 2 000 employees as the threshold, was very low.

Keywords Management control, management control systems, management control systems package, management control practices, cross-national management research.

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Tutkimuksen päätavoitteena oli kuvailla johdon ohjauskäytäntöjä kymmenen eri maan organisaatioissa. Tutkimuksessa pyrittiin selvittämään poikkeavatako ohjauskäytännöt maiden välillä tilastollisesti merkitsevällä tasolla. Lisäksi tutkittiin löytyykö tilastollisesti merkitseviä poikkeavuuksia suurten- ja pienten organisaatioiden ohjauskäytännöissä maiden sisällä.

Teoreettinen lähdeaineisto koostuu johdon ohjausjärjestelmiä sekä maiden välisiä johtamiskäytäntöjen eroja käsittelevästä kirjallisuudesta. Analysoitava aineisto on kerätty kansaivälisen tutkimusprojektin Effective Management and Control Systems yhteydessä. Käytetty tilastollinen menetelmä on yksisuuntainen varianssianalyysi.

Aineiston kuvailun lisäksi tutkimuksella on kaksi päätulosta. Maiden väliset ohjauskäytännöt poikkeavat tilastollisesti merkitsevällä tasolla usein. Eroja löytyi MCSP-typologian jokaisesta elementistä. Käytettäessä 2 000 työntekijää raja-arvona, pienten ja suurten organisaatioiden ohjauskäytännöt poikkeavat toisistaan tilastollisesti merkitsevällä tasolla hyvin harvoin.

Avainsanat Johdon ohjausjärjestelmät, johdon ohjausjärjestelmäpaketti, johdon ohjauskäytännöt.

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1. INTRODUCTION

Much of the existing management control system research has focused on studying individual control systems and –elements (Chenhall, 2003; Malmi & Brown, 2008). Especially studying formal accounting controls, such as organizational rules and budgets, has stood out. (Langfield-Smith, 1997; Sandelin, 2008). Langfield-Smith (1997) has argued that in modern rapidly changing business environment, formal controls alone are not effective enough. Thus, a call has been made for shedding light on other types of systems (Chenhall, 2003; Otley, 1999) such as administrative and cultural (Malmi & Brown, 2008).

In addition to the relatively narrow focus of the majority of the management control system research, a number of scholars have acknowledged that instead of studying single control systems or -elements, they should be understood as a package (Fisher, 1998; Malmi & Brown, 2008; Otley, 1999). Malmi and Brown (2008, p. 287) argue that management control systems "do not operate in isolation". Instead, single systems, almost without an exception, belong to broader totality of controls- the management control system package (Chenhall, 2003). Regardless of the idea of management control systems operating as a package was brought up already by Otley (1980), the amount of empirical research on this topic has remained relatively low (Malmi & Brown, 2008).

Even though the majority of the management control system research has been carried out within single nations, there has been an increasing interest towards exploring cross-national differences (Bhimani, 1999; Harrison & McKinnon, 1999). According to Chow et al. (1999), the relationship between management control system design and national culture is of importance for global organizations in order to understand the effectiveness of particular management controls in different national settings. The evidence in the research field is, however, mixed and consistent research findings still elude (W. Van der Stede, 2003).

The objective of this study is to present a descriptive quantitative analysis on the management control practices found in the organizations of ten countries that have been interviewed in the scope of an international research project called Effective Management and Control Systems. In addition to the description of the data, this thesis aims at exploring whether the observed differences in the practices between countries are statistically significant. Moreover, statistically significant differences in the practices of small and large organizations, 2 000 employees as the threshold, within countries are investigated.

This thesis adopts the management control system package perspective promoted by Malmi and Brown (2008). The analysis is not restricted to only the formal, accounting-based controls but it covers all elements of the MCSP typology. Instead of studying macro issues of management accounting, the main focus is on actual practices, in other words the micro level (Granlund & Lukka, 1998). This study does not have further explanatory aspirations and, as such, it positions among the research stream that aims at merely describing the observed differences between countries (Bhimani, 1999). It is important to notice that the organizations from different countries are examined without controlling for the effects of other factors (industry, for example). Such a straightforward approach has been criticized by Chow et al. (1999) for reducing the reliability of research findings. This notion is acknowledged by the writer, but controlling of several factors would not allow an analysis this extensive.

The data used in this study has been collected via a questionnaire for the top management of organizations in 11 countries. The writer has not participated in the data collection process, but instead, has received a complete, encoded dataset. Because of possibly unreliable data, Canada is excluded and the analysis covers Australia, Austria, Belgium, Denmark, Finland, Germany, Italy, Norway, Poland and Sweden. At least 50 organizations were interviewed in each country and the total number of observations analyzed in this study is 755. The method utilized for testing the statistical significance of the observed differences is one-way analysis of variance. The results of the quantitative analysis are discussed drawing on the MCSP typology by Malmi and Brown (2008).

The rest of the study is organized as follows. First, a literature review briefly covers existing management control system research. Secondly, the methodology applied in this study as well as the international research project will be discussed. Thirdly, the results of the quantitative analysis will be presented. Fourthly, the main findings will be discussed in the light of the existing literature. Finally, conclusions are drawn and ideas for future research are outlined.

2. LITERATURE REVIEW

This section provides a theoretical background for the study. First, the concepts of management control system (MCS from now on) and MCS package are discussed and defined. Secondly, the framework that will be utilized in this study, the MCSP typology, is presented. Thirdly, two other frameworks and their differences compared with the MCSP typology will be briefly discussed. Finally, cross-national research on management practices and MCSs will be outlined.

2.1 Management Control Systems

A fundamental difficulty in MCS research is the disparity of definitions within the literature (Fisher, 1998; Grabner & Moers, 2013; Green & Welsh, 1988). According to Chenhall (2003), MCS-term is occasionally used together with terms such as management accounting (MA), management accounting systems (MAS) and organizational controls (OC). Fisher (1998) argues that because of the inconsistent terminology, MCS studies are often incomparable and unification of research results is troublesome. Also Merchant and Van der Stede (2007, p. 4) acknowledge that comparing studies is difficult because the "MCS language is imprecise". Bisbe et al (2007) argue that in the coming MCS research, precise conceptual specification of constructs is of importance in order to enhance the possibility of easily understandable research results.

Earlier research has provided numerous definitions for MCS – some are fairly similar while also significant deviations exist (Malmi & Brown, 2008). Some researchers have a broad view on control as a whole (Abernethy & Chua, 1996). Merchant and Otley (2007, p. 785) argue that broad definitions of control are concerned with "almost everything managers do to acquire, deploy and manage resources in pursuit of the organization's objectives". Chenhall (2003), for example, interprets MCS as a broader term including both management accounting systems (MAS) as well as other types of controls.

On the other hand, MCS can be understood in a narrower manner. Merchant and Van der Stede (2007) make a distinction between strategic- and management control systems based on the argument of management control addressing employees' behavior. The rationale for this is very simple, since "It is people in the organization that make things happen" (Merchant. & Van der Stede, 2007, p. 8). Abernethy and Chua (1996, p. 573) share the behavioral perspective as they define organizational control system "broadly as a system that comprises a combination of

control mechanisms designed and implemented by management to increase the probability that organizational actors will behave in ways consistent with the objectives of the dominant organizational coalition". The behavioral aspects of MCS are important, since organization and individuals do not necessarily have congruent goals, which consequently creates a need for control (Flamholtz, 1983). Merchant and Van der Stede (2007) share Flamholtz's notion by saying that management control is related to managers making sure, with their own actions, that employees act in accordance with the best interest of the organization.

Merchant and Van der Stede (2007, p. 5) argue that management control "includes all the devices or systems managers use to ensure that the behaviors and decisions of their employees are consistent with the organization's objectives and strategies". Malmi and Brown (2008) have a similar view, but they distinguish systems that are merely designed to support decision-making. They argue that a decision-making system cannot be MCS if the purpose of the system is not to guide subordinate behavior. Managers might deploy systems only to support their own decision-making. Thus, decision-making support systems that are left unmonitored, should be called management accounting systems instead of MCS. Moreover, Malmi and Brown (2008) suggest that organizational controls are separated from management controls since they are not primarily used to direct employees. This thesis will view MCS in the vein of Malmi and Brown´s definition:

> *"As such, management controls include all the devices and systems managers use to ensure that the behaviours and decisions of their employees are consistent with the organisation's objectives and strategies, but exclude pure decision-support systems. Any system, such as budgeting or a strategy scorecard can be categorised as a MCS". (Malmi & Brown, 2008, p. 290)*

In addition to the diverse and often overlapping definitions of management control systems, there has been several ways in which the phenomena has been outlined in the literature (Ferreira & Otley, 2009; Malmi & Brown, 2008; Merchant. & Van der Stede, 2007; Simons, 1995). According to Auzair (2015), dimensions that have been used in differentiating control practices are for example action/results controls, formal/informal controls, tight/loose controls, restricted/flexible controls and impersonal/interpersonal controls. Auzair (2015) argues that action controls, formal controls, tight controls, restricted controls and impersonal controls can be classified as more bureaucratic whereas results controls, informal controls, loose controls, flexible controls and interpersonal controls belong to less bureaucratic controls. The numerous

ways in which management control systems can be classified and outlined further validate the diversity of this research field.

2.2 Management Control Systems Package

The idea of management control systems working as a package dates back to Otley's (1980) paper about the contingency theory of management accounting. On his paper, Otley (1980) argues that the various control arrangements employed by an organization should be understood as a package. Abernethy and Brownell's (1997, p. 246) empirical studies on non-accounting controls support Otley's idea as they conclude that "It is clear that organizations rely on combinations of control mechanisms in any given setting". Researchers have discovered that the control environment of an organization evolves over time. Otley (1999, p. 379) notifies that "different elements are added by different people at different times". Also Malmi and Brown (2008) argue that most of the modern organizations have several management control systems in place, and they are used at different times by different interest groups. Not studying MCS as a package and ignoring some control elements complicates reliable interpretation of research findings (Chenhall, 2003; Fisher, 1998)

Even though the idea of the package has existed in the literature for decades, the research has focused more on examining individual control systems (Chenhall, 2003; Malmi & Brown, 2008). Especially much weight has been put on the research of so-called formal, accounting-based control systems (Langfield-Smith, 1997; Malmi & Brown, 2008; Sandelin, 2008). More specifically, the research has focused on the financial implications of these formal control systems (Langfield-Smith, 1997; Otley, 1999). A potential reason for why accounting-based controls have been in the center of the research is that empirical studies have often been conducted in manufacturing and productions environments, where accounting-based controls are especially suitable (Abernethy & Brownell, 1997). However, it has been acknowledged already in the 90´s that effective control in the rapidly changing business environment requires widening the research scope (Langfield-Smith, 1997). Indeed, research has called for empirical enquiry concerning other types of control systems (Chenhall, 2003; Langfield-Smith, 1997; Otley, 1999), such as administrative and cultural (Malmi & Brown, 2008).

According to Grabner and Moers (2013) there is ambiguity about what is meant by MCS package, and it is of importance that the concepts of system and package should not be used interchangeably. Abernethy and Chua (1996, p. 573) refer to control systems operating as a

package when they are "internally consistent– that is, they are designed to achieve similar ends". The concept of internal consistency has not yet been explicitly defined (Grabner & Moers, 2013; Sandelin, 2008) and it remains as a notion that requires further research. Drawing from the work of Malmi and Brown (2008), Grabner and Moers (2013) conceptualize the management control package as the whole set of used practices, thus portraying the overall control environment of an organization. This thesis adopts the MCS package definiton by Malmi and Brown (2008, p. 278):

> *"As a general conception, a management control systems (MCS) package is a collection or set of controls and controls systems. The individual control systems may be more traditional accounting controls such as budgets and financial measures, or administrative controls, for example organisation structure and governance systems, along with more socially based controls such as values and culture."*

One potential suggestion for why MCS should be studies as a package is provided by Malmi and Brown (2008, p. 288) who argue that "gaining a broader understanding of MCS as a package may facilitate the development of better theory of how to design a range of control to support organisational objectives, control activities and drive organisational performance". Malmi and Brown (2008, p. 297) have also stressed the importance of understanding MCS configurations by arguing that "the package of controls which is likely to be the most effective in different types of relationships and settings is an important and pressing issue for the business community". Indeed, in addition to understanding the configurations, researchers have called out for more research regarding the relationships between the MCS package elements (Alvesson & Kärreman, 2004; Flamholtz, 1983; Mundy, 2010; Sandelin, 2008). Abernethy and Brownell (1997) argue that the general understanding of how the whole set of MCSs operate together will remain inadequate until the relationships between elements as well as the elements' effects on each other will be studied with more scrutiny.

2.3 MCSP Typology

The framework that will be used in this study is the MCSP typology by Malmi and Brown (2008). The way in which the typology classifies controls, compared with other other well-known frameworks, fits the purposes of this study. Moreover, the questionnaire that was used for collecting data in the research project Effective Management and Control Systems was designed based on the work of Malmi and Brown.

The conceptual typology (Figure 1) has been constructed through analyzing and compiling management control research from the last 40 years. The goal of the typology is to invoke further research regarding MCSPs. Five control elements are included in the typology: (1) planning, (2) cybernetic, (3) reward and compensation, (4) administrative and (5) cultural controls. In the following, all elements will be discussed in more detail. (Malmi & Brown, 2008)

Figure 1. MCSP typology by Malmi and Brown (2008)

<table>
<tr><td colspan="8">Cultural Controls</td></tr>
<tr><td colspan="3">Clans</td><td colspan="3">Values</td><td colspan="2">Symbols</td></tr>
<tr><td colspan="2">Planning</td><td colspan="4">Cybernetic Controls</td><td rowspan="2">Rewards and Compensation</td></tr>
<tr><td>Long -range planning</td><td>Short-term planning</td><td>Budgets</td><td>Financial Measurement Systems</td><td>Non-Financial Measurement Systems</td><td>Hybrid Measurement Systems</td></tr>
<tr><td colspan="8">Administrative Controls</td></tr>
<tr><td colspan="3">Governance Structure</td><td colspan="3">Organisation Culture</td><td colspan="2">Policies and Procedures</td></tr>
</table>

2.3.1 Planning Controls

Malmi and Brown divide planning controls to long-range planning and action planning. Long range planning is strategically focused and its aim is to create goals and actions for medium and long term, a period of over 12 months. According to Bedford and Malmi (2015) the strategic planning process can vary from formal and systematic to informal and emergent. Action planning, on the other hand, has tactical focus and is concerned with establishing targets and action plans for a period less than 12 months. (Malmi & Brown, 2008).

According to Flamholtz et al. (1985, p. 39) planning is an ex ante form of control "since it provides the information necessary to guide individual and group actions". Planning directs employee behavior through establishing goals for the functional areas of an organization. As a

control, planning also sets the standard to be achieved in relation to established goals (Flamholtz et al., 1985; Malmi & Brown, 2008). Through planning, members of an organization are aware of expectations set towards them when it comes to effort level and behavior. In addition, by ensuring that the actions of an organization are in line with desired outcomes, planning controls coordinate the cooperation between individuals and groups within an organization. (Malmi & Brown, 2008)

2.3.2 Cybernetic Controls

Otley and Berry (1980) argue that cybernetic control includes both activity monitoring and taking actions to make sure that the organizations' desired ends are achieved. Cybernetic process is "a process in which a feedback loop is represented by using standards of performance, comparing that performance to standards, feeding back information about unwanted variances in the system, and modifying the system's comportment" (Green & Welsh, 1988, p. 289).

Malmi and Brown argue that whether a cybernetic system should be understood as a control system depends on how it is used in an organization. A cybernetic system is a MCS if behavior is linked to targets and there is accountability for performance variations. Consequently, a cybernetic system is a decision support- or an information system if managers detect and address the variations by their own actions without involving other organizational actors. The authors include four cybernetic systems in the typology: (1) budgets, (2) financial measures, (3) non-financial measures and (4) hybrid measures that contain both financial- and non-financial information. (Malmi & Brown, 2008)

2.3.3 Reward and Compensation Controls

Organizations use reward and compensation controls for motivating and increasing the performance of individuals and groups. According to Flamholtz et al. (1985) compensation can be used as both ex-ante and ex-post control. When compensation is applied as an ex-ante control, employees have an incentive to behave in accordance with the organization's goals (Malmi & Brown, 2008). As an ex-post control, compensation is used for "rewarding outcomes and serving as a part of the feedback process by providing information on the consequences of past behaviors". (Bedford & Malmi, 2015, p. 8)

When rewards are linked to goals, the actions of individuals and groups are more congruent with the ones desired by the organization. Malmi and Brown argue that regardless of rewards most often being linked to cybernetic controls, organizations provide rewards and compensation also for alternative reasons. Group rewards, for example, are used in order to retain employees and promote cultural control. (Malmi & Brown, 2008).

2.3.4 Administrative Controls

The three types of administrative controls addressed in the typology are: (1) organization design and structure, (2) governance structure and (3) procedures and policies. (Malmi & Brown, 2008) Organizational structure can be viewed as a control device since managers can influence it (Malmi & Brown, 2008). Also Flamholtz (1983) identifies organizational structure as a component of a control system of an organization by citing Otley and Berry: "Indeed, organization can itself be viewed as a control process, occurring when groups of people feel the need to co-operate in order to achieve purposes which require their joint actions."(Otley & Berry, 1980, p. 232).

According to the authors, "Governance includes the formal lines of authority and accountability" and the systems that are used for coordinating the activities of units and functions within an organization. The governance structure affects the composition of the company's board and the ways in which management- and project teams are assembled. Governance directs the behavior of organizational members through meetings, for example. (Malmi & Brown, 2008)

Policies and procedures are used as a bureaucratic control approach to define desired processes and behavior. Standard operating procedures and practices as well as general rules are included in the policies and procedures section of the typology. The authors point out that action controls such as behavioral constraints, pre-action reviews and action accountability as proposed by Merchant and Van der Stede (2007) are only a part of what is considered as administrative controls in this typology.

2.3.5 Cultural Controls

Malmi and Brown recognize that culture is to some extent out of the reach of the managers. They do, however, consider culture as a control system if it is used to direct the behavior of organizational members. Three types of cultural control are addressed: (1) value-based controls, (2) symbol-based controls and (3) clan controls. (Malmi & Brown, 2008)

Value controls rest upon Simons' (1995) beliefs systems, the purpose being the communication of the values central to the strategy of an organization. Symbol-based controls mean that an organization may try to establish a culture with visible articulation such as workspace design and dress code. Ouchi (1979) introduced the concept of clan controls. According to Malmi and Brown, distinctive subcultures or groups within an organization can be named clans. Clan controls operate by creating values and shared beliefs through rituals and ceremonies. (Malmi & Brown, 2008)

2.4 MCSP Typology in Comparison with Object-of-Control- and Levers of Control Frameworks

Two widely used frameworks in MCS research are Objects of Control Framework by Merchant and Van der Stede (2007) and the Levers of Control framework by Robert Simons (1995). In the following, the differences of these frameworks compared with the MCSP typology are discussed.

Merchant and Van der Stede (2007) divide control elements into four groups: (1) results controls, (2) action controls, (3) personnel controls and (4) cultural controls. The idea of this framework is similar to the MCSP typology, that is, to classify, describe and conceptualize control systems. There are, however, some differences. First of all, Objects of Control framework includes planning in financial results systems whereas Malmi and Brown (2008) argue that planning does not necessarily have any reference to finance. Secondly, MCSP typology includes governance- and organizational structure in administrative controls on the basis that the management can influence them. Thirdly, MCSP typology presents rewards and compensation as a separate element of the package whereas in the Objects of Control Framework it falls under different classifications depending on its purpose. Finally, Merchant and Van der Stede (2007) distinguish personnel controls as a separate group whereas in MCSP

typology, personnel-related controls can be found under both cultural- and administrative controls.

The Levers of control framework by Robert Simons illustrates how managers can influence the strategy of an organization by using four levers. The four levers in the framework are (1) beliefs systems, (2) boundary systems, (3) diagnostic control systems and (4) interactive control systems. The basic idea of this framework is that the four levers of control create tension in the organization. Belief- and interactive systems create positive tension in forms of opportunism and emergency of new ideas whereas boundary- and diagnostic systems create constraints for making sure that desired goals will be achieved. According to Simons, selection of right levers and balancing their use is an extremely important device for managers. (Simons, 1995).

Simons' framework has fundamentally different focus compared with the other two frameworks. It is concerned with how managers can use the control systems instead of addressing questions of MCS design, structure or existence (Mundy, 2010). Moreover, Simons (1995) focuses on how managers should direct their attention between different types of control systems whereas Merchant and Van der Stede (2007) and Malmi and Brown (2008) are more focused with conceptualizing what types of MCSs exist.

2.5 Cross-national Research on Management- and Management Control Practices

According to Bhimani (2006), scholars have been interested in cross-national management research for over 40 years. Majority of cross-national studies in the field of accounting draw on some or all of Hofstede's (1980) dimensions of national culture, even though his findings have received criticism (Baskerville, 2003; Bhimani, 1999). Obviously, a problem in cross-cultural management research is that generally accepted theory on culture does not yet exist (Lim & Firkola, 2000). Previous research has also been criticized for treating culture too simplistically (Harrison & McKinnon, 1999). In addition, methodological decisions made in prior comparative management research have been subject of heavy criticism (Bhimani, 2006). Even though the problematic nature of defining culture in comparative cross-cultural research should not go unnoticed, the issue is not central in the scope of this study since the purpose is not to take a position on what is actually meant by a national culture. Instead, this study is one of the investigations that continue to "delineate differences across countries and to describe variety." (Bhimani, 1999, p. 413) without further explanatory aspirations.

A fundamental question of interest for researchers has been whether management accounting practices converge or diverge in different countries (Granlund & Lukka, 1998; Shields, 1998). The evidence on differences and similarities of management practices is mixed. In his study on styles of accountability, Thomas Ahrens (1996) found explicit differences in the practices of British and German firms. Also Bloom and Van Reenen (2010), have found plenty of differences in the management practices between countries. Then again, Granlund and Lukka (1998) as well as Shields (1998) have argued that in general, management accounting practices are converging.

Even though the majority of MCS research has been carried out within a single country, there has been an increasing amount of interest towards exploring cross-national differences (Bhimani, 1999; Harrison & McKinnon, 1999). The relationship between MCS design and national culture is of importance for global organizations that need to understand whether the effectiveness of particular management controls vary in different national settings (Chow et al., 1999). Evidence of MCS-specific research is mixed, however. In his review of Bhimani's *Management Accounting: European Perspectives,* Shields (1998) found evidence of convergence in terminology and techniques but less convergence in purposes and styles for using these very techniques. In their review of over 20 cross-national MCS studies, Harrison and McKinnon (1999) argued that the research field is still far from yielding reliable and consistent findings. Also Van der Stede (2003) recognized this problem in his paper on national culture's effect on MCS design. Harrison and McKinnon (1999) argue that insufficient conceptualization and definition of the examined organizational characteristics, inconsistent usage of cultural dimensions and variations in research methods between studies give rise to these contradictory findings. In similar vein, Chow et al. (1999) argue that previous studies have suffered from inadequate control of contingency variables (such as organization size or technology), as well as unsystematic data collection methods.

Management practices between nations or cultures can be studied at macro-, micro- or both levels. Macro level study focuses on concepts, ideas, techniques and system designs whereas micro level is concerned with the "practical "doing" of management accounting in the everyday life of organizational actors…" (Granlund & Lukka, 1998, p. 154). Even though this thesis occasionally touches on some macro level issues (such as the usage of budgetary systems), the main focus is evidently at the micro level.

3. RESEARCH METHOD

This chapter is organized as follows. First, the research method of this study will be covered. Secondly, the research project Effective Management and Control Systems will be presented. Finally, the quality of the questionnaire used as the data collection method will be discussed.

3.1 Research Method Applied in this Study

This study possesses several deductive characteristics. First of all, the objectivity of the researcher is achieved simply because he has not participated in the data collection process. Secondly, this study is not focused on defining the concepts that will be researched. Instead, this study draws on previous literature on management control. Thirdly, the quantitative data that is analyzed is standardized (coded). Finally, large enough sample size should allow some generalizations (Saunders et al., 2011). Furthermore, this study is of descriptive nature since it is designed to discover characteristics of a population (S. Anderson & Widener, 2006).

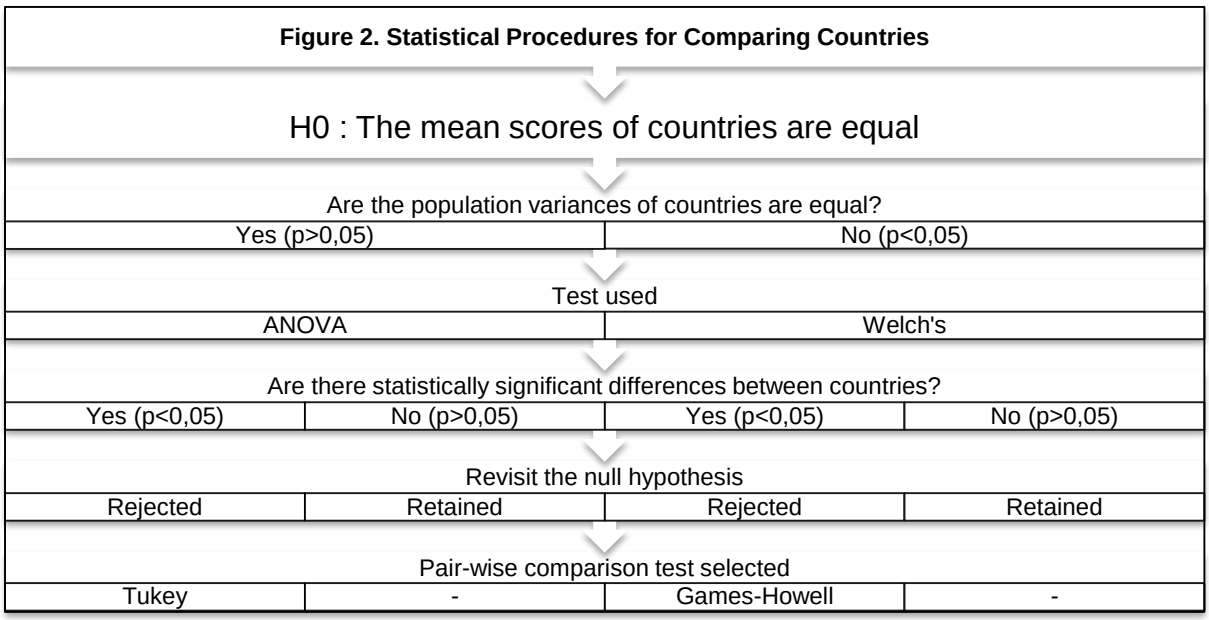
The quantitative analysis is based on comparing the mean scores of the constructs representing management control arrangements. Comparison is conducted between countries and between small and large organizations within countries. Differences in the mean scores are indicative of differences in the management control systems and -practices. In the following, the procedures for determining the statistical significance of the findings will be discussed.

The statistical procedure that is utilized in this research is called analysis of variance (ANOVA). In ANOVA, the null hypothesis is that all population means are equal. In this study, populations are the organizations from different countries. With the procedure, it can be concluded whether the differences in the means of the samples are large enough to reject the null hypothesis (D. Anderson et al., 2007). There are three assumptions required for the use of ANOVA: 1) the variables have to be normally distributed, 2) the variables have same variances for each group and 3) the observations must be independent (Liao, 2002). According to Lee and Ahn (2003) and Saunders et al. (2009), ANOVA is least sensitive to departures from the first assumption, especially when the sample sizes are large. The majority of the variables in this study are not normally distributed, but the large number of samples should make up for this. The assumption for the independence holds within this research since each interview is conducted separately. Whenever the equality of variances assumptions does not hold, Welch's test is applied to test the statistical significance of the differences in the means. Lantz (2013) argues that Welch's test performs very well as an alternative for the ANOVA test. The procedure for applying these

two types of tests in this research proceeds as follows. First, the equality of variances is tested by utilizing ANOVA-test in SPSS. In case the variances between countries are equal, the null hypothesis is either rejected or maintained based on the results of the ANOVA test itself. If ANOVA test indicates unequal variances, Welch's test is applied instead.

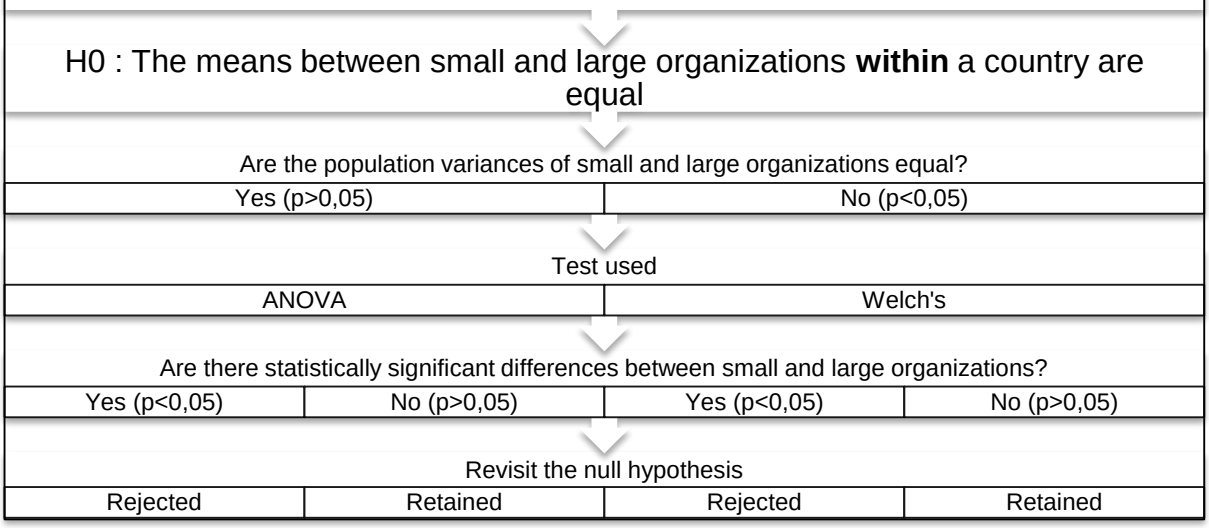
ANOVA and Welch's test, however, only tell us that the means of all populations (all countries) are not equal (D. Anderson et al., 2007). For the purposes of this study, this information alone is not sufficient as the researcher wishes to identify which countries are different from each other. Liao (2002) suggests that if ANOVA-test indicates statistically significant differences, pairwise comparisons should be conducted. These pair-wise (post hoc) tests reveal the groups that in fact differ from each other (Weiss, 2005). The SPSS-program offers several alternatives for post hoc tests. When the variances are equal, Tukey's test is applied. For unequal variances, Games-Howell test is used. Figure 2 demonstrates the course of statistical procedures applied in this study for comparing mean scores between countries.

Figure 2. Statistical Procedures for Comparing Countries



When means between small and large organizations within a country are compared, the procedure is very similar to above. However, pair-wise comparisons are not needed since only two groups are compared. It is important to notice that comparison between small and large organizations are always conducted within a country. In other words, means between small and large organizations of the whole population (all countries) are not compared. The steps taken in the statistical analysis can be seen in figure 3 below.

Figure 3. Statistical Procedures for Comparing Small and Large Organizations



It is important to notice that in this thesis, the term "organization" refers to one interviewed entity, be it a strategic business unit or a stand-alone firm. Moreover, none official classification of firm sizes is not applied. For example, according to OECD's definition, micro organizations employ less than ten people, small organizations between ten and 49 people, medium organizations between 50 and 249 people and large organizations over 250 people. This definition is not applied for two reasons. First of all, because analysis on differences between organizations of different size is not the principal research question, the number of groups was decided to be kept in two in order to keep the workload reasonable. Secondly, outlined by the research group, 50 employees was decided as the minimum threshold for the organizations to be interviewed. Thus, if official definitions would be followed, only six organizations out of 749 would be classified as small and the rest would classify as large. For purposes of this study, the mean number of employees of the whole population (1 688) is rounded up to 2 000 as a threshold. The researcher hopes that this definition would reveal whether the largest organizations of the sample would have distinguishable management control practices. From now on, organizations with 0-1 999 employees will be referred to as small and organizations

with more than 2 000 employes will be referred as large. The number of small and large organizations in each country can be seen in table 1 below.

Table 1. Number of small and large organizations in each country

	Employees			
	N/A	0-1999	>2000	Total
Australia	0	42	8	50
Austria	1	36	14	51
Belgium	0	43	7	50
Denmark	0	91	29	120
Finland	2	75	19	96
Germany	0	70	17	87
Italy	1	50	12	63
Norway	1	53	14	68
Poland	0	43	7	50
Sweden	1	95	24	120
Total	6	598	151	755

3.2 Effective Management and Control Systems Project

3.2.1 Research Project

Researcher Mikko Sandelin from Aalto University School of Business initiated the research project for two reasons. Firstly, there had been very little empirical research on what actually constitutes a MCS package. Secondly, Sandelin was interested in studying the connections between MCS packages and strategy.

In 2010, Sandelin started to develop a questionnaire that could be used to empirically study the MCS packages. The aim of the research project is "to understand what kind of management control arrangements exist, what arrangements are effective and in what kind of settings". In the ideation process, it was determined that the MCSP typology by Malmi and Brown (2008) would provide a sound framework that the questionnaire would be based on. The questionnaire was tested and further improved with both academics and business practitioners. After discussions with both occupational groups, the initial questionnaire appeared to be too long and complex and it was shortened in order to make it more comprehensible.

When the questionnaire was finalized, Sandelin and Teemu Malmi, an accounting professor in Aalto, started exploring whether academics in other countries would be interested in participating in the research project. The idea was discussed in accounting conferences, meetings and other occasions. According to Sandelin, the project gained substantial international interest. In 2010, an international kick-off meeting was held in Brussels, Belgium. In the end, research groups from ten additional countries decided to participate in the project.

As a result, the countries where the study would be conducted were Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Italy, Norway, Poland and Sweden.

3.2.2 Data Collection Process

The data collection process started briefly after the initial kick-off meeting. The researchers gathered three times during the process to update the overall status and discuss questions arisen. Because of the magnitude of the project, each country would be responsible for its own data collection process. Sandelin created a lexicon that was designed to assist the other research groups in interpreting the questionnaire. In the lexicon, the purpose and the answering perspective of each construct are explained in order to make sure that there would be no misunderstandings both from the interviewers' and interviewees' side.

In the countries where English is not the principal language, the research groups were encouraged to use a so-called back-and-forth translation. In back-and-forth translation, the original English questionnaire was translated into local language. After the original interviews were translated back to English, it could be examined whether the original meaning of the answers would be lost. According to Sandelin, there were no major confusions or answer distortions with the translations.

According to Sandelin, it was desired that researchers or doctoral students would collect the data. In Italy and Sweden, however, only Master's students collected the data. In addition, it was agreed that the primary form of interviews would be face to face. According to Sandelin, face to face interviews reduce the possibilities of communication breakdowns between the interviewer and the interviewee. In total, 68 % of the interviews were conducted face to face and 32 % by phone. The number of face to face and phone interviews per country as well as the total number of observations can be seen in the table 2 below.

Table 2. Form of Interviews per Country & Number of Total Observations

	Form of Interview		
Country	Face to face	Phone	Total observations
Australia	1	49	50
Austria	51	0	51
Belgium	49	1	50
Canada	27	25	52
Denmark	120	0	120
Finland	96	0	96
Germany	86	1	87
Italy	0	63	63
Norway	1	67	68
Poland	49	1	50
Sweden	65	55	120
Total	545	262	807

In addition to the lexicon, Sandelin created coding instructions for the research group. With the instructions, the interview material was encoded into numerical data for further quantitative analysis. A member of German research group was responsible for combining and validating the coding of each country's data. The whole dataset was ready towards the end of 2012.

The reliability of data was tested with several methods in Germany, Finland and Australia. There were some minor errors in some parts of the data and some codifications were corrected afterwards. According to Sandelin, the reliability of the data is at a very good level when the magnitude of the project is taken into account.

3.3 Questionnaire

3.3.1 Perspective and Focus

The questions are answered from the perspective of the top management team of a strategic business unit (SBU) or/and autonomous firm. In other words, the questionnaire is not concerned with the control practices of consolidated corporation's head offices. 59 % of the observations are from SBU's and 41 % from stand-alone organizations.

The questionnaire is mainly focused on the relationships between SBU top management and their subordinates. SBU top management refers to the top two levels of the SBU, such as CEO, CFO, COO and other members of the management team. Subordinates, on the other hand, are for example the business unit managers, department heads or the cost center responsibles that report directly to the top management. Regarding the answering perspective, it was acceptable to focus on managers who run business functions and have a large number of subordinates. Support managers and administrative managers with fewer subordinates were excluded if necessary.

3.3.2 Structure

The questionnaire consists of seven sections: A) Strategic planning, B) Short-term planning, C) Performance measurement and evaluation, D) Rewards and compensation, E) Organizational structure and management processes, F) Organization culture and values and G) Organization and environment. Sections A-F reflect the control elements of Malmi and Brown's (2008) MCSP typology, with a slight difference in section C) which is simplified to performance measurement and evaluation instead of cybernetic systems. Section G is concerned with

organizational variables and the environment where the organizations operate. Section G was added to the questionnaire in order to study the connection between MCSP and organizational strategy but it will not be analyzed in the scope of this study.

3.3.3 Items

In sections A-F, there are 31 constructs formed by 174 items. As an example, construct E3 that measures the division of influence between subordinates and top management consists of 13 individual items. This study will be conducted mostly on construct level, but for clarity, the types of items in the questionnaire will be discussed next.

The majority of the questions are asked in the form of Likert scales (e.g. 1-7). In these questions, the managers are asked to indicate the importance or the extent of whatever is being asked at the time. In addition, there are multiple choice questions in which the managers are asked to choose the most suitable alternative. These questions are most often concerned either with the frequencies of certain organizational activities or organizational members participating in these activities. The only construct with open questions is D1, but it is also encoded for quantitative analysis. The questionnaire can be found in Appendix 1.

3.4 Discussion on the Quality of the Questionnaire

Since the data for this study has been received from Sandelin and Malmi, the writer has not had any stake in the research design of the project. The choice of the data collection method as well as the arrangements of international coordination are out of the scope of this study. Because of these reasons, the research method of the project will not be extensively advocated. Instead, the questionnaire will be evaluated and discussed briefly.

The quality of the questionnaire directly affects the quality of the data produced by it. Pre-testing is conducted in order to make sure that questions are not misunderstood. The pre-testing should engage the experts of the topic and the objective is to make sure that the terminology and the form of the survey are suitable for the respondents (W. A. Van der Stede et al., 2006). According to Sandelin, the questionnaire was pre-tested with academics and business professionals and modified according to their feedback. This implies that the questionnaire itself was refined to produce high-quality data to start with.

According to Saunders et al. (2011), content validity indicates how well the questions in the questionnaire cover the research questions that are being investigated. According to writer's experience, the questions in the questionnaire fulfill their intended purpose of discovering existing management control arrangements well. The structure of the questionnaire draws on the MCSP typology of Malmi and Brown (2008) which is a synthesis of several decades of research. Because the questionnaire is based on such an extensive body of literature, it certainly covers everything that is generally considered essential in management control system research.

The international reach of the research project and the large number of researchers participating in it might affect the reliability of the questionnaire. Reliability refers to how consistent findings the questionnaire produces under different circumstances (Saunders et al., 2011). First concern is the fact that, even though not preferred, some of the interviews (262) have been conducted by phone. The questionnaire encompasses complex concepts and the writer contemplates whether the interviewer is able to instruct and support the interviewee enough via phone. Secondly, how can it be assured that each and every interview is conducted in a consistent manner? There is no way, of course, but the large number of interviewers possesses a danger that certain questions, or even the whole questionnaire, is understood differently by the interviewees. Coming back to the complexity of concepts in the questionnaire, there is a chance that the latent data that is aimed to brought out, alters along the way since the researchers might present information in a style that is new to the interviewees (S. Anderson & Widener, 2006).

One more thing worth discussing is the number of respondents within the SBU or organization. According to Van der Stede et al. (2006, p. 461) using only one respondent "weakens the validity of the study because a single individual often cannot reasonably reflect the beliefs of an entire organization". Keeping this in mind, there is a possibility that one respondent's possibly flawed view on the management control systems of her organization are presented as a fact. The magnitude of the project taken into account, conducting more than one interview per SBU has not been possible. Moreover, how would the data be interpreted in case of conflicting responses?

As mentioned earlier, the quality of the data itself is somewhat difficult to assess without participating in the design- and collection processes. Judging by the coding scheme of the questionnaire, the data should be of high quality. The coding instructions provided for all research groups are explicit and leave little room for mistakes. In addition, the data was evaluated with several methods in Finland and Australia and some minor errors were recoded.

It is important to notice that Canadian data was excluded from this analysis because of its significant deviation from other countries. If Canadian data would have been included, be it flawed or not, this thesis would be excessively focused with the uniqueness of Canadian organization's management control practices. As a consequence, the description of practices in other countries would be left with smaller attention. Apart from Canadian data, only a few clear errors could be found in the dataset

4. RESULTS

The results of the quantitative analysis will be presented in this section. The section is further divided into subsections A-F according to the structure of the original questionnaire. Not all constructs or items of the questionnaire are presented. As a general rule, this section covers constructs where a number of statistically significant differences between countries could be found. In addition, some constructs are chosen based on their practical relevancy.

Each examined construct is briefly described before presenting the results. All of the studied constructs and their explanations can be found in appendices 2 and 3. The results table covering each country is presented within the text. A results table with scores for small and large organizations within each country can be found in the appendix. In addition, the results for homogeneity of variances-, ANOVA- and Welch's tests will be presented in the appendix.

4.1 A - Strategic Planning

4.1.1 Strategic Planning Horizon

Construct A1 examines the strategic planning horizon of organizations. According to Welch's robust test of equality of means, the differences in the means between different countries are statistically significant (p=0.00). According to the Games-Howell post hoc test, the countries with the longest strategic planning horizons (Austria, Belgium and Poland) differ significantly from countries with shorter horizons (Denmark, Finland, Italy and Sweden). In the countries with a longer planning horizon, a three-year period is clearly less common than in the countries with shorter periods. Instead, a five-year period is common in both Austria and in Poland as around 10% of the organizations report a planning period of nine years or more. When the organization's size is taken into account, in all countries, except for Austria, the average strategic planning period is longer in organizations with over 2000 employees. Statistically significant differences can be found in Denmark (small m=3.567; large m=4.241) and in Norway (3.943; 5.000) .The average strategic planning period for each country can be seen in table 3 below.

Table 3. Strategic Planning Horizon (years)

Country	Mean	Std. Dev.	N
Austria	4.771	1.801	48
Belgium	4.700	1.298	50
Poland	4.660	2.210	50
Norway	4.132	1.692	68
Germany	4.000	1.486	87
Australia	3.980	1.672	50
Finland	3.792	1.321	96
Denmark	3.731	1.287	119
Sweden	3.478	1.307	115
Italy	3.397	1.508	63
Total	3.950	1.568	746

4.1.2 Nature of Strategic Objectives

Construct A3 also examines the extent to which the objectives of strategic planning are qualitative and quantitative. For qualitative ends, the differences in the means are statistically significant according to the ANOVA-test (p=0.02). For quantitative ends, the differences in the means are statistically significant according to the Welch's test (p=0.00). When it comes to the extent to which strategic objectives are of qualitative nature the Tukey HSD post hoc test reveals that the only two countries with statistically significant difference are Italy (4.714) and Finland (5.552). For the quantitative nature of strategic objectives, the Games-Howell post hoc test reveals that only countries with statistically significant differences are Finland (5.781) and Germany (4.954). These results would suggest that generally. the nature of strategic objectives is similar in all of the countries. Finland seems to be an exception with significantly higher mean score for both items. In Belgium, Germany and Poland the mean score for qualitative is higher, in Australia the scores are equal and in the rest of the countries strategic objectives seem to be quantitative to a higher extent. There are no statistically significant differences between small and large organizations in any country. The mean scores for the nature of strategic objectives can be seen in table 4 below.

Table 4. Nature of Strategic Objectives

	Qualitative			Quantitative		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Finland	5.552	1.239	96	5.781	1.216	96
Belgium	5.520	1.147	50	5.000	1.457	50
Poland	5.400	1.294	50	5.340	1.423	50
Germany	5.379	1.424	87	4.954	1.532	87
Austria	5.208	1.750	48	5.604	1.888	48
Denmark	5.192	1.380	120	5.275	1.523	120
Sweden	5.150	1.482	120	5.403	1.422	119
Australia	5.120	1.624	50	5.120	1.304	50
Norway	4.971	1.293	68	5.588	1.363	68
Italy	4.714	1.396	63	5.127	1.591	63
Total	5.225	1.414	752	5.336	1.480	751

4.1.3 Specificity of Strategic Ends and Means

The items c, d and e of construct A3 measure how detailed, accurate and documented the strategic ends and means are. A mean score for these three items was calculated in order to create a construct that illustrates how specific both ends and means produced by the strategic planning process are. The Pearson correlations between all of the items for both ends and means are at least moderate ($r > 0.3$). When it comes to the specificity of strategic ends, the variances between countries are equal ($p=0.17$) and the differences in the means of different countries are statistically significant ($p=0.00$). According to the Tukey HSD post hoc test, Austria (5.773) differs significantly from all other countries except Finland (5.413) and Poland (5.367). The countries from which these three afore mentioned countries differ most are Italy (4.524), Norway (4.784) and Sweden (4.539). For the specificity of strategic ends, there are two countries in which the mean scores between different sized organizations are statistically significant: Germany (small 4.5000; =5.314) and Sweden (4.442; 4.958).

In a similar vein. Austria has clearly higher mean score for the specificity of means compared with the other countries. According to the Tukey HSD post hoc test. Austria (5.315), Finland (4.903) and Poland (4.927) differ significantly from Sweden (4.014) and Germany (3.977). For the specificity of strategic means, there are no statistically significant differences between small and large organizations in any country. The mean scores can be seen in table 5 below.

Table 5. Specificity of Strategic Ends and Means

	Ends			Means		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Austria	5.773	1.488	47	5.135	1.495	47
Finland	5.413	1.053	96	4.903	1.198	96
Poland	5.367	1.201	50	4.927	1.568	50
Australia	4.960	1.321	50	4.373	1.346	50
Denmark	4.897	1.266	120	4.456	1.332	120
Norway	4.784	1.085	68	4.279	1.338	68
Germany	4.659	1.342	87	3.977	1.462	87
Belgium	4.647	1.181	50	4.207	1.104	50
Sweden	4.539	1.078	120	4.014	1.302	120
Italy	4.524	1.323	62	4.383	1.466	60
Total	4.911	1.269	750	4.417	1.394	748

4.1.4 Review- and Revise Frequency of Strategic Ends and Means

Construct A4 examines how often strategic ends and means are reviewed (monitored) and revised (changed to meet new circumstances). For analysis purposes, the original answers were translated into months. It was assumed that alternative 7 (every third year or less frequently) would mean an updating frequency of once every three years, e.g. 36 months. There are statistically significant differences in the mean scores for all four items. Anova was used for

the revise frequency of ends (p=0.01) and the review frequency of means (p=0.07). Welch's test was applied for the review frequency of ends (p=0.00) and the revise frequency of means (p=0.00).

If ends are examined first, Games-Howell test reveals Austria being very different from other countries when it comes to the review frequency. Germany (7.488), Italy (8.365) and Norway (7.118) are the only countries from which Austria's mean score of 10.429 months does not differ statistically significantly. Poland, on the other hand, has the shortest frequency with a mean score of 4.860 months.

When it comes to the revising frequency, the only countries with statistically significant difference between each other are Denmark (13.008) and Italy (9.150). For all countries, as can be expected, the review frequency is shorter than the revise frequency. Only statistically significant difference can be found in Poland, where the review frequency of ends in small organizations 5.140 months and 3.142 months in large organizations. The mean scores can be seen in table 6 below.

Table 6. Review- and Revise Frequencies of Strategic Ends (months)

	Review			Revise		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Austria	10.429	5.557	49	12.163	8.163	49
Italy	8.365	6.121	63	9.150	6.268	60
Germany	7.488	4.239	86	11.570	7.506	86
Norway	7.118	6.415	68	10.353	7.123	68
Denmark	6.832	6.273	119	13.008	7.965	119
Belgium	6.720	5.573	50	12.480	7.121	50
Sweden	6.210	5.342	119	10.757	7.093	111
Australia	5.660	6.143	50	9.260	6.037	50
Finland	5.490	4.726	96	12.115	8.111	96
Poland	4.860	4.136	50	9.980	7.506	50
Total	6.809	5.630	750	11.279	7.471	739

Even though the ANOVA-test suggests that average review frequencies of means differ on a statistically significant level, the Tukey HSD post hoc test found no statistically significant pairwise differences.

When it comes to the revising frequency, statistically significant differences in the mean scores could be found between Denmark-Austria and Denmark-Germany. The mean updating frequency is significantly higher in Denmark (11.112) whereas Austria (6.816) and Germany (7.871) have the two shortest frequencies. Like ends, means are generally reviewed more often that revised. Austria is an exception since the mean score for revising (6.816) is lower than mean score for reviewing (6.939). The difference is not statistically significant but it is worth noting since the review- and revise frequencies are not as close to each other in any of the other

countries. For the review frequency of means, there are statistically significant differences between small and large organizations in Finland (3.833;6.013) and Italy (11.818;7.245). Italy and Sweden are the only countries in which the update frequency is lower in large organizations. The mean scores can be seen in table 7 below.

Table 7. Review- and Revise Frequencies of Strategic Means (months)

	Review			Revise		
Country	Mean	Std. Dev	N	Mean	Std. Dev.	N
Italy	8.148	6.269	61	8.533	6.331	60
Austria	6.939	3.960	49	6.816	3.745	49
Sweden	6.939	5.857	114	9.459	6.821	109
Denmark	6.739	5.761	115	11.122	7.795	115
Belgium	6.200	5.357	50	10.740	7.997	50
Norway	6.090	6.660	67	8.134	6.578	67
Germany	5.765	4.191	85	7.871	4.629	85
Australia	5.580	4.509	50	8.360	4.801	50
Finland	5.537	6.709	95	9.453	9.081	95
Poland	4.900	4.613	50	9.020	7.350	50
Total	6.333	5.637	736	9.142	6.971	730

4.1.5 Organizational Levels Participating in the Formation of Strategic Ends and Means

In construct A5, the organizational levels participating in the formulation of strategic ends and means is examined. The alternatives for this question are: 1) Corporate management + top management, 2) Top management alone, 3) Top management + 1 level below, 4) Top management +2 levels below and 5) Top management and more than two levels below. Smaller the score, more top-down the formulation process is. Since the distances between different alternatives are not equal, calculating mean scores for this construct is difficult. For example, how should a mean score of 1.5 be interpreted? Thus, this construct is examined through relative frequency tables 8 and 9 below.

Table 8. Organizational Levels Participating in the Formation of Strategic Ends

	Managerial Levels						
Country	CM+TM	TM	TM+1L	TM+2L	TM+>2L	Total	N
Norway	67.2%	7.5%	13.4%	7.5%	4.5%	100.0%	67
Sweden	40.7%	39.0%	12.7%	3.4%	4.2%	100.0%	118
Poland	34.0%	46.0%	12.0%	4.0%	4.0%	100.0%	50
Austria	30.6%	6.1%	55.1%	8.2%		100.0%	49
Denmark	26.1%	34.5%	28.6%	9.2%	1.7%	100.0%	119
Australia	24.0%	44.0%	12.0%	12.0%	8.0%	100.0%	50
Finland	22.9%	37.5%	25.0%	12.5%	2.1%	100.0%	96
Belgium	20.0%	42.0%	32.0%	6.0%		100.0%	50
Germany	19.8%	40.7%	32.6%	3.5%	3.5%	100.0%	86
Italy	3.2%	82.5%	12.7%		1.6%	100.0%	63
Total	29.3%	38.0%	23.1%	6.7%	2.9%	100.0%	748

Table 9. Organizational Levels Participating in the Formation of Strategic Means

	Organizational Levels						
Country	CM+TM	TM	TM+1L	TM+2L	TM+>2L	Total	N
Sweden	30.8%	40.2%	17.1%	7.7%	4.3%	100.0%	117
Poland	26.0%	40.0%	20.0%	6.0%	8.0%	100.0%	50
Denmark	17.8%	33.9%	35.6%	9.3%	3.4%	100.0%	118
Norway	16.7%	16.7%	42.4%	12.1%	12.1%	100.0%	66
Australia	16.0%	38.0%	22.0%	12.0%	12.0%	100.0%	50
Germany	15.1%	23.3%	44.2%	9.3%	8.1%	100.0%	86
Austria	14.3%	6.1%	63.3%	14.3%	2.0%	100.0%	49
Finland	12.6%	23.2%	36.8%	21.1%	6.3%	100.0%	95
Belgium	8.0%	40.0%	38.0%	10.0%	4.0%	100.0%	50
Italy	1.6%	66.1%	22.6%	4.8%	4.8%	100.0%	62
Total	17.0%	32.7%	33.4%	10.8%	6.2%	100.0%	743

For formation of strategic ends, according to Welch's test, differences between countries are statistically significant with p values of 0.00. The Games-Howell post hoc test reveals that when it comes to ends, only Finland and Norway differ from each other significantly. Norwegian strategy formulation process seems to be extremely top-down since in only 25 % of organizations one or more level below top management participates. The corresponding figure for Finland is 40 %. The most common formulation composition is CM+TM in Norway and Sweden and TM+1L in Austria. In all other countries, the most popular composition seems to be TM. Australian and Finnish organizations seem to engage two or more managerial levels in the process more often than other countries. Another point worth bringing up is that in 82.5% of Italian organizations only the top management participates.

When it comes to the formulation of strategic means, the Games-Howell post hoc test indicates that Sweden differs, on a statistically significant level, from Austria, Finland, Germany and Norway. Like the formulation of ends, Swedish practice seems to be very top down with only 29.9 % of the organizations involving lower managerial levels in the process at all. Same as in ends, Italian organizations are rather top-down with 66.1 % of the organizations involving only top management of SBU. Generally, lower managerial levels are involved slightly more compared to ends indicating more freedom when the initial strategic targets are set. In addition to Finland and Australia, also in Norway lower managerial levels are more often involved when it comes to the formulation of means. This is interesting finding since for ends, Norwegian organizations seemed to have very strict top-down practice.

Statistically significant differences between small and large organizations could be found only in Poland. In Poland, 100% of large organizations involve only TM or TM+1L, the corresponding figure for small organizations is 71.2 %.This indicated that the process is significantly more top-down in large organizations.

4.1.6 Importance of Strategic Planning in Guiding Subordinate Behavior

Construct A6 measures the overall importance of Strategic Planning in guiding subordinate behavior. The differences in the mean scores are statistically significant (p=0.00) according to the Welch´s test. The Games-Howell post hoc test reveals that there is a number of statistically significant differences between countries for this construct. Firstly, Finland (6.250) and Belgium (5.900) are countries in which the mean score for the importance is considerably high and they both differ, on a statistically significant level, from Australia (4.780), Austria (4.980), Germany (4.563), Italy (4.689), Norway (5.147) and Poland (5.120). In addition, the mean score of Finland (6.250) significantly differs from that of Denmark (5.458) and Sweden (5.706). Germany (4.563) and Italy (4.689) have the lowest mean scores and in addition to afore mentioned countries, they differ significantly from Denmark (5.458). Statistically significant differences between small and large organizations could be found only in Italy where small organizations (4.854) find strategic planning more important than large organizations (4.000). Other three countries in which the mean score for small organizations is higher (but the difference is not statistically significant) are Australia, Finland and Sweden. The mean scores for the importance of strategic planning can be seen in table 10 below.

Table 10. Importance of Strategic Planning in Guiding Subordinate Behavior

Country	Mean	Std. Dev.	N
Finland	6.250	0.995	96
Belgium	5.900	0.886	50
Sweden	5.706	1.304	119
Denmark	5.458	1.528	120
Norway	5.147	1.417	68
Poland	5.120	1.100	50
Austria	4.980	1.738	51
Australia	4.780	1.765	50
Italy	4.689	1.478	61
Germany	4.563	1.796	87
Total	5.334	1.520	752

4.2 B – Short-term Planning

4.2.1 Translation of Strategy into Short-term Action Plans

Construct B1 examines how strategic ends and means are translated into more concrete short-term action plans. The smaller the score, the more top-down the process is. The construct aims at revealing different degrees of autonomy when it comes to action plans. The alternatives for this construct are 1) Action plans are decided at the top and given to lower levels to be implemented, 2) Important areas of action are defined at the top and subordinates are required to develop specific action plans, 3) Action plans arise in intensive negotiations within planning guidelines given from the top, 4) Action plans are based on subordinates' interpretations of how to affect upper level strategic objectives and 5) Subordinates autonomously determine actions within strategic themes along the business.

Similarly to construct A5, this construct is inspected through relative frequency table 11 found below. According to Welch's test, there are statistically significant differences between countries (p=0.00). According to the Games-Howell pair-wise post hoc test, Italy and Finland are countries that have statistically significantly different answers compared with others. In Italy , the translation process seems to be strictly top-down since 87.3% of the organizations have answered either alternatives 1 or 2. Italy is statistically significantly different from Austria, Belgium, Denmark, Finland, Germany and Sweden. Finland, on the other hand, has by far the lowest cumulative percentage of answers 1 and 2 (34.2%) compared with others meaning less top-down approach. Finland differentiates itself from Denmark, Italy, Norway and Poland – the countries with the most top-down approach. In all countries, except for Finland, the most common approach seems to be alternative 2) important areas of action are defined at the top and subordinates are required to develop specific action plans. The results can be seen in table 11 below.

Table 11. Process of Translating Strategy into Short-term Plans

	Process						
Country	1	2	3	4	5	Total	N
Italy	25.4%	61.9%	11.1%	1.6%		100.0%	63
Norway	20.9%	58.2%	4.5%	11.9%	4.5%	100.0%	67
Australia	20.0%	42.0%	14.0%	14.0%	10.0%	100.0%	50
Sweden	19.5%	45.8%	16.1%	11.9%	6.8%	100.0%	118
Denmark	19.2%	46.7%	24.2%	3.3%	6.7%	100.0%	120
Poland	18.0%	52.0%	20.0%	10.0%		100.0%	50
Germany	11.5%	51.7%	20.7%	5.7%	10.3%	100.0%	87
Belgium	8.0%	40.0%	36.0%	12.0%	4.0%	100.0%	50
Finland	7.3%	27.1%	51.0%	13.5%	1.0%	100.0%	96
Austria	5.9%	56.9%	27.5%	3.9%	5.9%	100.0%	51
Total	15.8%	47.2%	23.1%	8.6%	5.2%	100.0%	752

The answers between small and large organizations disperse differently in the countries. If measured with the cumulative percentage of answers 1 and 2, the process seems to be more top-down in large organizations in Australia (Small 59.5%; Large 75.0%), Austria (61.1%; 71.4%), Denmark (61.5%; 79.3%) and Poland (67.4%; 85.7%). On the other hand, in Belgium (53.5%; 14.3%), Finland (21.1%; 38.7%), Germany (58.8%; 64.3%), Italy (83.3%; 88.0%), Norway (71.4%; 80.8%) and Sweden (50.0%; 69.1%) the top-down approach is stronger in smaller organizations. Belgium is the only country in which the difference is statistically significant.

4.2.2 Target-setting Process of Short-term Ends and Means

Construct B2 focuses on how short-term targets are set. Targets can be set for ends (e.g. financial outcomes or customer satisfaction) but also for means such as projects and activities to improve ends (e.g. cost cutting programs or product redesign). The alternatives differ from construct B1, but also this construct aims at revealing different degrees of subordinate autonomy. The alternatives are 1) Top management sets targets and passes them to subordinates, 2) Top management sets targets, but revises them in negotiations with subordinates, 3) Target setting is quite long, iterative negotiation process between organizational levels, 4) Subordinates set autonomously targets, but they are subject to top management acceptance and 5) Subordinate se targets autonomously with little, if any, management involvement.

For Ends, differences between different countries are not statistically significant ($p=0.143$). The Tukey HSD test revealed no statistically significant differences in any pair-wise comparisons. In General, it seems that the target setting process for ends is quite top-down and by far the most common approach is top management setting targets and revising them in negotiations with subordinates. In all other countries except for Belgium and Poland, the answers between small and large organizations are very similar. In Belgium, small organizations are clearly more top-down and in Poland vice versa. These differences are not, however, statistically significant. The frequency table 12 can be seen below.

Table 12. Formulation Process of Short-term Ends

	Process						
Country	1	2	3	4	5	Total	N
Italy	40.3%	50.0%	8.1%	1.6%		100.0%	62
Finland	32.3%	49.0%	8.3%	8.3%	2.1%	100.0%	96
Poland	26.0%	48.0%	10.0%	16.0%		100.0%	50
Sweden	24.6%	57.6%	9.3%	5.9%	2.5%	100.0%	118
Austria	23.5%	56.9%	13.7%	3.9%	2.0%	100.0%	51
Denmark	22.5%	57.5%	10.0%	9.2%	.8%	100.0%	120
Norway	22.1%	64.7%		11.8%	1.5%	100.0%	68
Australia	22.0%	56.0%	10.0%	12.0%		100.0%	50
Germany	21.8%	64.4%	8.0%	4.6%	1.1%	100.0%	87
Belgium	20.0%	50.0%	16.0%	14.0%		100.0%	50
Total	25.5%	56.0%	9.0%	8.2%	1.2%	100.0%	752

When it comes to means, the differences in the scores between countries are statistically significant (p=0.00) according to Welch's test. According to the Games-Howell post hoc test, there are some statistically significant pair-wise differences between countries. First of all, Italy differs significantly from Austria, Finland and Germany. In Italian organizations, alternatives 1 and 2 account for 76.2% of the answers which is by far the highest figure among all the countries. This can be interpreted as a very top-down approach. As for means, alternative 2) seems to be the most popular approach in all countries but Austria, where interestingly alternative 4) seems to be very popular. The scores can be seen in table 13 below.

Table 13. Formulation Process of Short-term Means

	Process						
Country	1	2	3	4	5	Total	N
Italy	27.0%	49.2%	11.1%	12.7%		100.0%	63
Poland	18.0%	44.0%	10.0%	28.0%		100.0%	50
Australia	16.0%	48.0%	18.0%	16.0%	0.02	100.0%	50
Sweden	13.8%	48.3%	15.5%	15.5%	6.9%	100.0%	116
Denmark	11.8%	47.9%	22.7%	16.8%	.8%	100.0%	119
Belgium	10.0%	46.0%	24.0%	20.0%		100.0%	50
Norway	8.8%	55.9%	1.5%	27.9%	5.9%	100.0%	68
Finland	6.3%	44.8%	25.0%	16.7%	7.3%	100.0%	96
Austria	3.9%	35.3%	15.7%	41.2%	3.9%	100.0%	51
Germany	3.4%	58.6%	13.8%	20.7%	3.4%	100.0%	87
Total	11.5%	48.4%	16.4%	20.3%	3.5%	100.0%	750

When small and large organizations are compared, there are some differences between countries. If the top-down approach is once again measured through the cumulative percentage of answers 1 and 2, Poland and Italy are the only countries in which the percentage is higher for large organizations. In all other countries, it seems that subordinates have more autonomy when it comes to ways in which short-term targets are to be met. The differences between small and large organizations are not, however, statistically significant in any country.

4.2.3 Update Frequency of Short-term Plans

Construct B3 examines how often performance targets, underlying action plans and resource commitments (personnel, external services etc.) are updated. For analysis purposes, the alternatives were translated into months. Alternative 1 was translated into one week – 0,25 months. All of these three items could be merged into one that would reflect the general update cycle of short term plans. There was, however, little if any correlation between the items and moreover, examining them separately but still comparing them together might reveal more than just one aggregated variable. The mean scores can be seen in table 14 below.

Table 14. Update Frequency of Short-term Plans (months)

	Targeted Performance			Action Plans			Resource Commitments		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Germany	8.164	4.467	87	3.506	3.181	87	4.046	4.017	87
Austria	7.922	4.449	51	3.402	3.301	51	3.873	3.905	51
Norway	7.721	4.888	68	4.843	4.416	67	2.840	3.398	67
Denmark	6.538	4.617	120	3.513	3.260	119	2.137	2.178	119
Sweden	5.277	4.649	120	4.353	4.228	119	3.968	4.267	117
Italy	4.881	3.988	63	4.369	3.784	63	4.639	4.211	63
Belgium	4.845	3.986	50	3.440	3.287	50	3.130	3.161	50
Australia	4.305	4.227	50	2.840	3.143	50	2.570	3.196	50
Finland	3.714	2.214	96	3.357	2.041	96	2.987	2.157	96
Poland	3.555	4.125	50	3.120	3.543	50	2.235	2.677	50
Total	5.770	4.504	755	3.732	3.504	752	3.245	3.459	750

First of all, targeted performance is updated least frequently in all of the countries. Resource commitments are updated most frequently in Australia, Belgium, Denmark, Finland, Norway, Poland and Sweden. In Austria, Germany and Italy action plans are updated most frequently. Countries in which the difference between the update frequencies of targeted performance is significantly lower than for the other two items are Austria, Denmark, Germany and Norway. In Finland, Italy and Sweden, on the other hand, all items are updated with similar frequency.

According to Welch's test, the differences in the means are statistically significant for targeted performance ($p=0.00$) and for resource commitments ($p=0.00$). For action plans, the differences between countries are not statistically significant ($p=0.055$) and the Games-Howell post hoc test revealed no pair-wise differences. According to the Games-Howell post hoc test for targeted performance, there is a high number of statistically significant pair-wise differences. First of all, Austria, Germany and Norway are countries in which targeted performance is updated clearly least frequently – in all of these countries the average update frequency is less than two times a year. These three countries differ significantly from Australia, Belgium, Finland, Italy and Poland. In Poland and Finland, targeted performance is updated most frequently. When it comes to resource commitments, Denmark is statistically significantly

different from Germany, Italy and Sweden. In Denmark, resource commitments are updated almost once every two months where as in these other three countries the frequency is closer to once every four months. Poland does not significantly differ from other countries except from Italy, even though resource commitments are updated very frequently. There are no statistically significant differences between small and large organizations in any country.

4.2.4 Importance of Short-term Planning in Guiding Subordinate Behavior

Item B5 is concerned with the overall importance of short-term planning for subordinate behavior guiding purposes. Short-term planning is deemed most important in Austria (6.196) and Finland (6.115) and according to the Games-Howell post hoc test, these two countries differ, on a statistically significant level, from Norway (5.485). In addition, Finland differs significantly from Sweden (5.622). The mean scores for the importance of short-term planning can be seen in table 15 below.

Table 15. Importance of Short-term Planning in Guiding Subordinate Behavior

Country	Mean	Std. Dev.	N
Austria	6.196	1.000	51
Finland	6.115	0.993	96
Denmark	5.867	1.004	120
Germany	5.713	1.109	87
Belgium	5.680	1.168	50
Sweden	5.622	1.150	119
Italy	5.590	1.371	61
Australia	5.580	1.012	50
Poland	5.540	1.199	50
Norway	5.485	1.015	68
Total	5.754	1.114	752

The mean scores are different for small and large organizations in different countries. The importance is higher for larger organizations in Belgium, Denmark, Germany, Norway and Sweden. In Australia, Austria, Finland, Italy and Poland, on the other hand, short-term planning is deemed more important in smaller organizations. The differences between small and large organizations are, however, statistically significant only in Sweden (6.000; 5.511).

4.3 C – Performance Measurement and Evaluation

4.3.1 Usage of Budgetary- and Extended Performance Measurement Systems

Construct C2 aims at understanding the way in which budgets and extended performance measurement systems are used in the organizations. Budgetary systems include variance analyses and forecasts that deal with financial information. As a management control system, budgets rely heavily on cybernetic principles as explained in the theory section. Performance measurement systems often focus on several dimensions of performance such as financial, customer, process and people. Performance measurement systems can, for example, measure managerial performance. BSC's and KPI dashboards are common examples of performance measurement systems. Items a-c refer to diagnostic usage of both types of systems whereas items d-h refer to interactive usage of these systems. These items were merged together to form four constructs: Diagnostic usage of budgets (a-c), interactive usage of budgets (d-h), diagnostic usage of PM systems (a-c) and interactive usage of PM systems (d-h). Combining these afore mentioned items together can be justified with strong positive Pearson correlation between items for each constructs ($r > 0,5$).

Before going to the statistical tests, few words about the results in general. In all countries, the mean score for Diagnostic usage is higher for both budgets and PM systems. When it comes to the question of which type of system is used to a higher extent diagnostically and interactively, there are some differences between countries. Performance measurement systems are used to a higher extent diagnostically than budgetary systems in Austria, Finland and Poland. In other countries, the mean score for diagnostic usage of budgets is higher. For interactive usage, the mean score is higher for performance measurement systems in Australia, Austria, Finland and Poland. For other countries, budgetary systems are used interactively to a higher extent than performance measurement systems.

According to Welch's test, there are statistically significant differences in the mean scores for the diagnostic usage of budgets ($p=0.02$). For interactive usage of budgets, ANOVA test reveals statistical significance in differences between countries ($p=0.00$). According to the Games-Howell test budgetary systems are used, on a statistically significant level, to a higher extent diagnostically in Denmark (5.581) and Sweden (5.454) compared with Finland (4.847) and Italy (4.566). When it comes to the interactive usage of budgets, Italy (3.616) is significantly different from all other countries except for Norway (4.199). Austria (5.261) on the other hand

differs significantly from Finland (4.481), Norway (4.199) and Sweden (4.417). The mean scores can be seen in table 16 below.

Table 16. Different Usage Purposes of Budgetary Systems

	Diagnostic			Interactive		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Denmark	5.581	1.385	120	4.583	1.396	120
Sweden	5.454	1.104	119	4.417	1.196	119
Austria	5.435	1.486	46	5.261	1.274	46
Australia	5.300	1.568	50	4.748	1.572	50
Germany	5.267	1.362	86	4.542	1.314	86
Norway	5.167	1.562	68	4.199	1.305	68
Belgium	5.167	1.257	50	4.680	1.232	50
Poland	5.113	1.590	50	4.624	1.488	50
Finland	4.847	1.456	96	4.481	1.379	96
Italy	4.566	1.880	63	3.616	1.620	63
Total	5.221	1.464	748	4.484	1.403	748

Differences in the means for both diagnostic- and interactive usage of PM systems are statistically significant with p values of 0.00. When it comes to the diagnostic usage of performance measurement systems, Italy (4.132) differs significantly from Australia (5.280), Austria (5.719), Denmark (5.450), Finland (5.421), Poland (5.527) and Sweden (5.093). Austria, with the highest mean score of 5.719, on the other hand, is different from Belgium (4.667), Germany (4.767), Italy (4.132) and Norway (4.537). For the interactive usage of performance measurement systems, Italy (3.232) differentiates itself from all other countries but Norway (3.849). Austria (5.528), on the other hand, has the highest mean score and is statistically significantly different from Belgium (4.300), Denmark (4.458), Germany (4.247), Italy (3.232), Norway (3.849) and Sweden (4.350). The mean scores can be seen in table 17 below.

Table 17. Different Usage Purposes of Performance Measurement systems

	Diagnostic			Interactive		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Austria	5.719	1.356	45	5.528	1.374	46
Poland	5.527	1.240	50	5.044	1.229	50
Denmark	5.450	1.476	120	4.458	1.442	120
Finland	5.421	1.503	96	4.827	1.531	96
Australia	5.280	1.454	50	4.896	1.422	50
Sweden	5.208	1.811	118	4.350	1.569	118
Germany	4.767	1.884	86	4.247	1.696	86
Belgium	4.667	1.650	50	4.300	1.510	50
Norway	4.537	2.044	67	3.849	1.769	67
Italy	4.132	2.194	63	3.232	1.802	63
Total	5.093	1.751	745	4.430	1.638	746

In both small and large organizations in all countries, both budgetary systems and performance measurement systems are used diagnostically to higher extent than interactively. When it comes to the magnitude of mean scores for both diagnostic and interactive usage of budgetary systems, statistically significant differences can be found only in Denmark. For both diagnostic and interactive usage of budgets, the mean score is higher for large organizations. For diagnostic

and interactive usage of performance measurement systems, there are no statistically significant differences between large and small organizations in any country.

4.3.2 OPEX and CAPEX Control Methods

Construct C1 aims at understanding how OPEX and CAPEX are controlled by top management. Items 1-3 aim at detecting the tightness of traditional budgets whereas items 4-6 represent modern possibilities for cost control. The alternatives are 1) Expenses are set fixed, 2) Expenses are set relatively fixed (additional budgets are rare but possible), 3) Expenses are set relatively flexible (additional budgets are common), 4) Expenses are flexible and they scale up/down with output volume, 5) Expenses are flexible and they scale up/down with revenue and 6) Expenses are determined case by case.

According to the ANOVA-test, there are statistically significant differences in the mean scores of different countries for OPEX ($p=0.018$). For CAPEX, the differences in the means are statistically significant ($p=0.00$) according to the Welch's test. It is important to notice that the significance tests treat each item separately instead of treating alternatives 1-3 together against alternatives 4-6. The results for both OPEX and CAPEX will be discussed in more detail below.

The Tukey HSD post hoc test reveals that when it comes to OPEX controlling methods, there are statistically significant differences in the mean scores only between Australia and Norway. The difference stems clearly from the fact that in Australia, traditional budgets are not used to a similar extent as in Norway. In Australia 46.0 % of the organizations report a usage of traditional budgets and 54.0 % use modern methods. In Norway, on the other hand, the same distribution is 76.5%; 23.5%. These two countries are the two extremes when this distribution is considered. Denmark, Poland and Sweden are other countries in which the modern methods are used relatively commonly. However, none of them are even close to the 50/50 split. The tightest traditional budgets can be found in Finland, Austria, Italy and Norway. Out of the modern methods, the scaling up/down with revenue- alternative seems to be relatively popular in Australia, Finland, Poland and Sweden. Scaling up with volume is used to some extent in Australia and Denmark. The scores can be seen in table 18 below.

Table 18. Methods for OPEX Control

	Tightness of traditional Budgets			Modern cost-control methods				
Country	Fixed	Relatively fixed	Relatively flexible	Flexible, volume	Flexible, revenue	Case by case	Total	N
Norway	32.4%	26.5%	17.6%	11.8%	5.9%	5.9%	100.0%	68
Finland	31.3%	30.2%	5.2%	8.3%	22.9%	2.1%	100.0%	96
Austria	21.6%	35.3%	15.7%	13.7%	11.8%	2.0%	100.0%	51
Sweden	21.2%	18.6%	22.0%	11.9%	21.2%	5.1%	100.0%	118
Denmark	20.8%	26.7%	10.0%	22.5%	14.2%	5.8%	100.0%	120
Belgium	20.0%	22.0%	26.0%	14.0%	10.0%	8.0%	100.0%	50
Australia	16.0%	22.0%	8.0%	20.0%	24.0%	10.0%	100.0%	50
Germany	14.9%	34.5%	21.8%	8.0%	19.5%	1.1%	100.0%	87
Italy	14.3%	42.9%	17.5%	12.7%	4.8%	7.9%	100.0%	63
Poland	14.0%	22.0%	20.0%	14.0%	28.0%	2.0%	100.0%	50
Total	21.2%	27.8%	15.9%	13.7%	16.6%	4.8%	100.0%	753

In all countries except for Australia and Poland, large organizations use traditional budgets clearly to a higher extent. For smaller firms, in all countries except for Australia, traditional budgets are used more commonly. The differences are not, however, statistically significant

When it comes to control methods for CAPEX, the Games-Howell post hoc test reveals that Australia and Denmark are countries that separate themselves from the rest of the group the most. Australia is significantly different from all countries except Denmark, Finland and Sweden. Denmark, on the other hand, differs significantly from Germany, Italy, Norway and Poland. Australia and Denmark are countries in which traditional budgets are used the least compared with other countries. The traditional budget vs. modern method splits are: Australia (48.0%; 52.0%), Denmark (55.6%; 44.4%), Sweden (66.9%; 33.1%) and Finland (73.7%; 26.3%). In the rest of the countries, the split is over 80/20, Germany being the extreme with a split of 93.1%; 6.9%. The tightest traditional budgets for CAPEX can be found in Austria and Italy. Out of the modern methods, the case by case approach is used to a higher extent in Australia, Denmark, Finland and Sweden. Scaling up/down with output volume is used very rarely in any of the countries whereas scaling with revenue is used to some extent in Australia, Poland and Sweden. The results for CAPEX controlling methods can be seen in table 19 below.

Table 19. Methods for CAPEX Control

	Tightness of traditional Budgets			Modern cost-control methods				
Country	Fixed	Relatively fixed	Relatively flexible	Flexible, volume	Flexible, revenue	Case by case	Total	N
Belgium	30.0%	38.0%	20.0%		4.0%	8.0%	100.0%	50
Norway	29.4%	38.2%	14.7%	5.9%	1.5%	10.3%	100.0%	68
Austria	27.5%	56.9%	7.8%	3.9%	2.0%	2.0%	100.0%	51
Denmark	26.5%	20.5%	8.5%	6.8%	5.1%	32.5%	100.0%	117
Finland	25.3%	33.7%	14.7%	2.1%	4.2%	20.0%	100.0%	95
Germany	20.7%	51.7%	20.7%		2.3%	4.6%	100.0%	87
Sweden	20.3%	27.1%	19.5%	3.4%	10.2%	19.5%	100.0%	118
Poland	20.0%	50.0%	12.0%	2.0%	12.0%	4.0%	100.0%	50
Italy	19.0%	58.7%	4.8%	3.2%	3.2%	11.1%	100.0%	63
Australia	14.0%	18.0%	16.0%	6.0%	18.0%	28.0%	100.0%	50
Total	23.4%	37.1%	14.2%	3.5%	6.0%	15.9%	100.0%	749

For CAPEX, all of the large organizations use traditional budgets more commonly than modern methods. In Austria, Belgium, Italy and Poland none of the large organizations use alternative methods for CAPEX control. For Small firms, Australia and Denmark are the only countries in which alternative methods are more popular. The differences for this construct are statistically significant in Denmark, Italy and Poland.

4.3.3 Basis of Performance Evaluation

Construct C3 explores the basis of subordinates' performance evaluation. Out of this construct, the extent to which performance measurement is based on financial- and non-financial measures is further examined. The alternative measures can be found in the questionnaire in Appendix 1. First of all, comparing these two items together does not mean that they would rule out each other. In fact it is quite the opposite – an organization may, to a very high extent, base performance evaluation on both financial- and non-financial measures. Instead, the purpose in examining this construct is to find out whether organizations in some countries put significantly different amounts of weight for these two types of measures.

Firstly, Norway is the only country in which the mean score for non-financial measures is higher than for financial measures. For all other countries, performance measurement seems to be based to a higher extent on financial measures. According to Welch's test, there are statistically significant differences for both financial measures (p=0.00) and financial measures (p=0.04996). When it comes to financial measures, the country most different from the others is Finland (6.406). Finland has the highest mean score and the only countries that are not significantly different are Australia (5.780), Austria (5.920) and Poland (5.940). Italy, once again, has the lowest mean score of 5.048. The Games-Howell test did not reveal any statistically significant pair-wise differences between the countries for non-financial measures. The results for this construct can be seen in table 20 below.

Table 20. Basis for Performance Evaluation

	Financial measures			Non-financial measures		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Finland	6.406	0.958	96	5.104	1.632	96
Poland	5.940	1.236	50	4.780	1.375	50
Austria	5.920	1.748	50	5.360	1.601	50
Denmark	5.892	1.208	120	5.142	1.232	120
Australia	5.780	1.298	50	5.260	1.275	50
Belgium	5.600	1.245	50	5.160	1.057	50
Sweden	5.525	1.495	120	5.075	1.379	120
Germany	5.253	1.693	87	4.805	1.683	87
Italy	5.048	1.679	63	4.484	1.637	62
Norway	5.000	1.932	68	5.265	1.229	68
Total	5.653	1.511	754	5.044	1.441	753

For non-financial measures, there are no statistically significant differences between small and large organizations in any of the countries. For financial measures, however, the differences between mean scores are statistically significant in Austria (5.667; 6.571), Denmark (5.758; 6.310), Germany (5.057; 6.059) and Italy (4.900; 5.833). Clearly, large organizations base subordinates' performance evaluation on financial measures to a higher extent.

4.3.4 Frequency of Formalized Performance Evaluations

Construct C6 examines how often leadership performance and business performance is formally evaluated. Leadership performance refers to managerial behavior whereas business performance refers to the results achieved. For analysis purposes, the answers were recoded into months. It was assumed that alternative 6) less frequently than once a year would mean updating frequency of two years – 24 months. The not applicable answers are excluded from this analysis.

First of all, for all countries except for Austria, business performance is updated more often than leadership performance. For Austria, the mean updating frequency is exactly the same for both business- and leadership performance. In addition to Austria, also Finnish and German organizations evaluate both leadership- and business performance on a relatively similar schedule. Accordin to the Welch's test, there are statistically significant differences in the mean scores for both variables with p values of 0.00. When it comes to leadership performance, Germany (10.691) and Italy (12.000) are clearly different from countries with shorter frequencies – Australia (8.085), Finland (9.108) and Norway (8.220). Interestingly, Germany and Italy are not statistically significantly different from Sweden nor Poland. When it comes to business performance, Games-Howell test reveals that there are statistically significant differences between almost all countries. Finland (8.250), Germany (9.190), Austria (10.735) and Italy (9.000) are different from the countries with significantly shorter update frequencies. Austria's scores are interesting also because all 49 organizations with valid data have reported the same update frequency for both leadership- and business performance. It might be the reality, but coding or response error is possible as well. The results for both leadership performance and business performance can be seen table 21 below.

Table 21. Frequency of Formal Performance Evaluations (months)

	Leadership Performance			Business Performance		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Italy	12.000	5.331	58	9.000	5.588	60
Austria	10.735	4.071	49	10.735	4.071	49
Germany	10.691	3.923	81	9.190	4.079	84
Belgium	9.449	4.757	49	5.041	4.252	49
Denmark	9.415	4.545	118	4.325	4.391	120
Finland	9.108	3.354	93	8.250	3.910	96
Poland	8.864	4.573	44	5.306	5.153	49
Sweden	8.735	4.312	117	5.581	4.171	117
Norway	8.220	4.247	59	4.483	4.451	60
Australia	8.085	4.154	47	5.354	4.827	48
Total	9.491	4.416	715	6.605	4.891	732

Statistically significant differences between small and large organizations could be found in Belgium for leadership performance (10.05; 5.86) and in Sweden for business performance (7.02; 5.11). In the rest of the countries, the differences between small and large organizations are not statistically significant.

4.3.5 Importance of Performance Measurement and Evaluation in Guiding Subordinate Behavior

Construct C7 measures the overall importance of performance measurement and evaluation in guiding subordinate behavior. According to the ANOVA-test, the differences in the means are statistically significant (p=0.00). Finland, again, has the highest mean score of 6.073. According to the Tukey HSD post hoc test, Finland is statistically significantly different from Australia (5.420) and Italy (5.200) – the two countries with the lowest means scores. In addition, Italy is statistically significantly different from Austria (5.961) and Sweden (5.850). The mean scores for each country can be seen in table 22 below.

Table 22. Importance of Performance Measurement and Evaluation in Guiding Subordinate Behavior

Country	Mean	Std. Dev.	N
Finland	6.073	1.066	96
Austria	5.961	1.148	51
Sweden	5.850	1.164	120
Belgium	5.800	0.990	50
Denmark	5.625	1.182	120
Germany	5.575	1.245	87
Norway	5.559	1.138	68
Poland	5.520	1.182	50
Australia	5.420	1.214	50
Italy	5.200	1.375	60
Total	5.686	1.191	752

The biggest differences between small and large organizations in the importance of performance measurement and evaluation can be found in Australia (5.548; 4.750) and in Poland (5.442;6.000). These differences are not, however, statistically significant.

4.4 D – Rewards and Compensation

4.4.1 Performance Measures in Determining Financial Rewards

Construct D1 aims at understanding the measures that are used to determine the financial rewards of subordinates. In addition, the construct explores the weights of these measures in the overall rewarding formula. The list for different types of performance measures as well as the most popular financial- and non-financial measures in each country can be found in Appendix 4 and 5.

First of all, it was examined whether organizations would use financial- and/or non-financial measures. According to the ANOVA-test, there are significant differences between countries. The Games-Howell post hoc test revealed that Finland is statistically significantly different from Denmark, Germany, Italy, Norway, Poland and Sweden. As much as 91.7 % of Finnish organizations use both types of measures whereas the countries from which Finland differs seem to use either financial- or non-financial measures to a higher extent. Also Austria, another country in which the usage of both types of measures is very common, differs significantly from Sweden and Norway. Interestingly, Belgium and Poland are the only countries in which smaller organizations use both types of measures to a higher extent than large organizations.This can, however, be attributable to the fact that number of large organizations with valid data is under 10 for both countries. 100 % of larger organizations in Australia and Finland use both types of measures. The frequencies for countries can be seen in table 23 below.

Table 23. Usage of Financial- and Non-financial measures as a Base for Financial Rewarding

	Usage				
Country	Both	Only financial	Only non-Financial	Total	N
Finland	91.7%	7.3%	1.0%	100.0%	96
Austria	85.1%	10.6%	4.3%	100.0%	47
Australia	84.0%	10.0%	6.0%	100.0%	50
Belgium	74.4%	20.5%	5.1%	100.0%	39
Germany	69.5%	17.1%	13.4%	100.0%	82
Denmark	68.8%	30.1%	1.1%	100.0%	93
Poland	66.0%	18.0%	16.0%	100.0%	50
Italy	61.5%	15.4%	23.1%	100.0%	52
Sweden	57.0%	32.0%	11.0%	100.0%	100
Norway	52.1%	33.3%	14.6%	100.0%	48
Total	71.1%	20.1%	8.8%	100.0%	657

Secondly, the average weight of financial- and non-financial measures in the total rewarding formula was examined. Only observations where financial + non-financial weight equaled 100% were included in the analysis. Interestingly, neither differences in the average weight of financial measures (p=0.067) nor non-financial measures (p=0.069) are statistically significant

in the 95 % confidence interval. The differences are close to being statistically significant, and there seem to be quite big variations between countries. Countries can be split roughly into two groups: Belgium, Denmark, Finland, Norway and Sweden are countries in which weight of financial measures stand out. The average weights can be seen in table 24 below.

Table 24. Average Weight of Measures in Rewarding Formula

	Financial			Non-financial		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Denmark	70 %	26.4%	87	30 %	26.4%	87
Belgium	68 %	25.2%	39	32 %	25.2%	39
Sweden	67 %	33.7%	89	33 %	33.8%	89
Norway	66 %	34.4%	47	34 %	34.4%	47
Finland	65 %	22.5%	85	35 %	22.5%	85
Austria	59 %	24.9%	38	41 %	24.9%	38
Australia	59 %	27.5%	50	41 %	27.5%	50
Poland	57 %	34.5%	50	43 %	34.5%	50
Germany	57 %	34.4%	77	43 %	34.4%	77
Italy	55 %	37.0%	49	45 %	37.0%	49
Total	63 %	30.6%	611	37 %	30.6%	611

In Belgium, Denmark, Germany and Norway the average weight for financial measures is higher in small organizations. In Italy and Poland, on the other hand, large organizations put more weight on financial measures. The only statistically significant differences between different sized organizations can be found in Italy. In Italy, split is 49.68% financial and 50.32% non-financial for small organizations and 73.64% financial and 26.36% non-financial for large organizations.

4.4.2 Nature of Rewarding

Construct D3 examines the nature of rewarding in organizations. Within this study, the extent to which rewarding is financial and non-financial, respectively, is examined. These two items do not rule out each other and it its possible that rewarding is financial and non-financial to a very high extent in many organizations. According to the Welch's test, the differences in the mean scored between different countries are statistically significant with p values of 0.00. According to the Games-Howell post hoc test, the mean score for the extent of financial rewarding is statistically significantly different, compared with other countries, especially for the two extremes – Finland (6.375) and Germany (4.437). Only countries in which the mean score is not significantly different from Finland are Austria (5.688), Italy (5.700) and Poland (5.960). Germany, on the other hand, is significantly different from all countries except for Australia (5.260) – country with the second lowest mean score. Statistically significant differences in the mean scores between small and large organizations can be found in Denmark (5.220; 6.310) and Poland (5.814; 6.857). Norway is the only country in which the mean score is higher for large organizations.

When it comes to non-financial rewarding, the Games-Howell post hoc test reveals that Denmark (3.008), Italy (3.017) and Sweden (3.059) differ statistically significantly from countries with higher mean scores – Australia (4.360), Austria (4.229), Belgium (4.200), Germany (4.103) and Poland (3.980). Even though, at first glance, it would seem that low mean scores for financial rewarding would mean higher scores for non-financial rewarding, that is statistically not the case. There is weak positive correlation (r=0.12) and it is not even statistically significant (p=0.737). When it comes to different sized organizations, Australia and Belgium are only countries in which the mean score is higher for small organizations. The differences are not, however, statistically significant. Only statistically significant difference can be found only in Germany (4.329; 4.882). The mean scores can be seen in table 25 below.

Table 25. Nature of rewarding

	Financial			Non-financial		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Finland	6.375	1.008	96	3.333	1.499	96
Poland	5.960	1.029	50	3.980	1.505	50
Italy	5.700	1.499	60	3.017	1.790	60
Austria	5.688	1.587	48	4.229	1.949	48
Belgium	5.620	1.260	50	4.200	1.591	50
Norway	5.500	1.912	68	3.794	1.589	68
Denmark	5.483	2.397	120	3.008	1.885	120
Sweden	5.317	2.110	120	3.059	1.733	119
Australia	5.260	1.676	50	4.360	1.336	50
Germany	4.437	1.796	87	4.103	1.455	87
Total	5.507	1.845	749	3.571	1.729	748

4.4.3 Purposes of Financial- and Non-financial rewarding

Construct D4 seeks at revealing the importance of different purposes of both financial- and for non-financial rewarding. The purposes of both types of rewarding are a) Committing subordinates, b) Motivating subordinates and c) Directing subordinates' attention. According to the Welch's test, there are statistically significant differences in the mean scores between countries for all purposes of both financial- and non-financial rewarding (p=0.00).

When it comes to committing with financial rewards, Denmark (3.558) and Norway (3.940) are statistically significantly different from the rest of the countries where the mean score is clearly higher. Motivating, on the other hand, receives relatively similar scores across countries but Poland (5.480) is significantly different from Austria (4.960), Gemany (4.759) and Sweden (4.692). When it comes to directing subordinates' attention with financial rewards, Finland (5.802) differentiates itself statistically significantly from all countries except for Austria (5.388) and Poland (5.080). Judging from these results, financial rewarding is considered especially important in these three countries. Further support for this result can be drawn from

the overall importance of rewards and compensation in guiding subordinate behavior (Chapter 4.4.5). Poland, Austria and Finland have the highest mean scores for the overall importance as well. The mean scores for purposes of financial rewarding can be seen in table 26 below.

Table 26. Importances of Different Purposes for Financial Rewarding

	Committing			Motivating			Directing Attention		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Poland	5.600	1.178	50	5.480	1.015	50	5.080	1.397	50
Austria	5.313	1.371	48	4.708	1.271	48	5.388	1.497	49
Australia	5.100	1.374	50	4.960	1.370	50	4.740	1.575	50
Belgium	5.060	1.583	50	4.920	1.688	50	4.960	1.355	50
Finland	5.052	1.217	96	5.396	1.277	96	5.802	1.245	96
Italy	4.966	1.485	59	5.458	1.454	59	4.831	1.683	59
Germany	4.862	1.651	87	4.759	1.599	87	4.414	1.821	87
Sweden	4.675	1.774	120	4.692	1.758	120	4.800	1.813	120
Norway	3.940	1.874	67	4.761	1.818	67	4.567	1.877	67
Denmark	3.558	2.199	120	4.792	2.234	120	4.617	2.123	120
Total	4.680	1.772	747	4.960	1.679	747	4.900	1.756	748

For committing, the scores are statistically significantly higher for large organizations in Denmark (3.154; 4.828), Poland (5.442; 6.571) and Sweden (4.537; 5.208). Denmark is the only country in which the differences are statistically significant also for motivating (4.582; 5.448) and for directing attention (4.319; 5.552).

When it comes to committing with non-financial rewards, Denmark (2.867) is statistically significantly different from all other countries. In addition, Norway (3.910) and Sweden (4.390) differ significantly from Belgium (5.340), Finland (5.208) and Germany (4.816). Motivating through non-financial rewards is significantly different in Denmark (4.050) compared with Austria (5.319), Belgium (5.480), Finland (5.542) and Germany (5.345). When it comes to directing attention, Denmark (3.542), once again, is different from all other countries except for Austria (4.255), Italy (4.304) and Poland (4.360). In Austria, committing and motivating are seen as very important but directing attention has a very low score. The mean scores for purposes of non-financial rewarding can be seen in table 27 below.

Table 27. Importances of Different Purposes for Non-financial Rewarding

	Committing			Motivating			Directing Attention		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Belgium	5.340	1.533	50	5.480	1.432	50	5.000	1.457	50
Finland	5.208	1.414	96	5.542	1.151	96	4.750	1.549	96
Australia	4.980	1.505	50	4.980	1.407	50	4.580	1.566	50
Austria	4.915	1.920	47	5.319	2.033	47	4.255	2.201	47
Italy	4.857	1.949	56	4.893	1.826	56	4.304	1.848	56
Germany	4.816	1.653	87	5.345	1.576	87	4.632	1.805	87
Poland	4.500	1.717	50	4.540	1.764	50	4.360	1.849	50
Sweden	4.390	1.904	118	4.551	1.819	118	4.390	1.868	118
Norway	3.910	1.649	67	4.851	1.550	67	4.537	1.550	67
Denmark	2.867	1.983	120	4.050	2.386	120	3.542	2.215	120
Total	4.436	1.912	741	4.884	1.829	741	4.378	1.870	741

For non-financial rewards committing, statistically significant differences between small and large organizations can be found in Belgium (5.029; 6.143), Denmark (2.571; 3.793) and Germany (4.643; 5.529). For motivating, there are no statistically significant differences within any country. For directing attention, significant difference can be found in Germany (4.429; 5.471).

4.4.4 Possible Maximum Bonus as a % of Annual Base Salary

In Construct D5, managers were asked what is the subordinates' possible maximum bonus as a % of their annual base salary. According to Welch's test, the differences in the means are statistically significant (p=0.00) and, the mean percentage (15.2%) of Norway is statistically significantly different from that of Austria's (24.5%), Finland's (21.7%), Germany's (22.6%) and Poland's (27.1%). In fact, there is statistically significant (p=0.00) strong positive correlation (r=0.423) between the average maximum bonus and the extent to which rewarding is financial. In other words, countries in which financial rewarding is emphasized, the average maximum bonuses are also higher. The differences between small and large organizations are statistically significant in Australia (24.5%; 44.4%), Denmark (16.8%; 27.5%), Italy (15.5%; 23.8%) and Sweden (15.3%; 24.7%). The average maximum bonuses can be seen in table 28 below.

Table 28. Maximum Performance-based Bonus as a % of Annual Base Salary

Country	Mean	Std. Dev.	N
Australia	27.7 %	26 %	50
Poland	27.1 %	20 %	50
Austria	24.5 %	14 %	49
Germany	22.6 %	13 %	86
Finland	21.7 %	7 %	96
Belgium	20.0 %	14 %	50
Denmark	19.4 %	16 %	120
Italy	17.2 %	10 %	57
Sweden	17.0 %	16 %	116
Norway	15.2 %	13 %	66
Total	20.6 %	15 %	740

4.4.5 Importance of Rewards and Compensation in Guiding Subordinate Behavior

When it comes to the general importance of rewards and compensation in guiding subordinate behavior, the differences in the means between countries are statistically significant (p=0.00). According to the Games-Howell test, and as can be expected of the earlier results, Denmark (4.417) differs significantly from countries with higher mean scores – Austria (5.388), Finland (5.354), Italy (5.241) and Poland (5.500). Statistically significant differences between small and large organizations can be found in Denmark (4.209; 5.069) and Poland (5.302; 6.714). In

both countries, rewards and compensation are deemed more important in large organizations. The mean scores can be seen in table 29 below.

Table 29. Importance of Rewards and Compensation in Guiding Subordinate Behavior

Country	Mean	Std. Dev.	N
Poland	5.500	1.129	50
Austria	5.388	1.272	49
Finland	5.354	1.289	96
Italy	5.241	1.355	58
Germany	4.966	1.450	87
Sweden	4.925	1.551	120
Australia	4.840	1.557	50
Norway	4.750	1.449	68
Belgium	4.640	1.306	50
Denmark	4.417	2.019	120
Total	4.956	1.546	748

4.5 E – Organizational Structure and Management Processes

4.5.1 Broadness and Stability of Management Groups

Construct E1 measures the broadness and the stability of the management groups. Dynamic management group composition changes whereas stable management group always consists of the same people. In narrow management groups, participants are mostly business unit managers whereas in broad management groups, also middle-level managers and experts might participate. In Finland and Sweden, this construct was measured with a 5-step Likert scale instead of the 7-step scale used in other countries. For some reason, the broadness of management groups across SBU boundaries has been, however, answered with a 7-point scale. To keep the reporting clear, Finland and Sweden are excluded from this analysis.

It seems that management groups are relatively stable in all countries both within and across SBU and BU boundaries. According to the Tukey HSD post hoc test, Italy (5.371) is significantly different from Australia (5.640) Austria (6.583), Denmark (6.109) and Norway (6.104), when it comes to the stability of management groups within SBU and BU boundaries. Even though Italy has the lowest mean score, one can not say that the management groups would be particulary dynamic in any country. When it comes to the stability of management groups across boundaries, the Games-Howell test tells us that Denmark (3.775) and Poland (4.380) are statistically significantly different from the rest of the countries. In other countries, the stability seems to be on the same level with management groups within the SBU and BU. The scores for Stability can be seen in table 30 below.

Table 30. Stability of Management Groups

	SBU & BU			Across Boundaries		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Austria	6.583	.986	48	6.326	1.620	46
Germany	6.172	1.269	87	5.897	1.414	87
Denmark	6.109	.937	119	3.775	2.926	120
Norway	6.104	.987	67	5.672	1.106	61
Belgium	6.020	.958	50	5.720	1.539	50
Poland	5.740	1.259	50	4.380	2.147	50
Australia	5.640	1.241	50	5.380	1.260	50
Italy	5.371	1.462	62	5.491	1.339	53
Total	5.989	1.176	533	5.161	2.114	517

Management groups within the SBU and BU seem to be a little bit broader than those across the boundaries. Austria (3.104) has the narrowest management groups within SBU and BU and it significantly differs from all other countries but Denmark (3.881) and Italy (3.952). For management groups across boundaries, Austria (2.609) and Denmark (2.483) are significantly

different from other countries. Australia and Germany seem to have the broadest based management groups. The mean scores for broadness can be seen in table 31 below.

Table 31. Broadness of Management Groups

	SBU & BU			Across Boundaries		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Australia	4.540	1.681	50	4.480	1.717	50
Germany	4.310	2.019	87	4.425	1.992	87
Belgium	4.300	1.632	50	4.080	1.676	50
Norway	4.239	1.908	67	4.082	1.838	61
Poland	4.220	1.607	50	3.800	1.863	50
Italy	3.952	1.442	62	3.717	1.680	53
Denmark	3.881	1.940	118	2.483	2.282	120
Austria	3.104	1.753	48	2.609	1.693	46
Total	4.068	1.826	532	3.611	2.071	517

For the broadness and stability of management groups both within and across SBU boundaries, statistically significant differences between small and large organizations can be found in following countries. In Norway, management groups within SBU are more stable in small organizations (6.250) than in large organizations (5.571). The same applies for management groups across SBU boundaries (5.830; 5.077). In Denmark, on the other hand, management groups across SBU boundaries are less stable in small organizations (3.440; 4.828). In Belgium, management groups within SBU are narrower in small organizations (4.093; 5.571). The same goes for the broadness of groups across SBU boundaries (3.791; 5.857). In Denmark, management groups across SBU boundaries are narrower in small organizations (2.220; 3.310).

4.5.2 Degree of Influence on Decisions

Construct E3 measures how much influence does top management have on certain decisions compared with subordinates. The decisions can be seen in the questionnaire, found in Appendix 6. The lower the mean score, the more influence top management has. A mean score of 4 would mean an equal influence. Only responses with a valid answer to each decision were included. When a mean score for all the decisions is calculated, there are statistically significant differences between countries (p=0.00). Austria (3.389), Belgium (3.919) and Finland (3.973) are statistically significantly different from Germany (3.134), Italy (2.925), Norway (3.105) and Poland (3.229). In Belgium and Finland, the overall influence on decisions seems to be nearly equal between subordinates and top management of the SBU. In all countries, mean score for subordinate overall influence is higher in large organizations. In Belgium (3.806; 4.603) and in Sweden (3.446; 4.095) the difference in the mean scores for overall influence is statistically significantly higher in large organizations. The mean scores can be seen in table 32 below.

Table 32. Influence on Decisions

Country	Mean	Std. Dev.	N
Finland	3.973	1.013	31
Belgium	3.919	.891	42
Austria	3.825	.745	33
Sweden	3.597	.907	73
Denmark	3.445	.791	66
Australia	3.389	.734	39
Poland	3.229	.707	45
Germany	3.134	.704	70
Norway	3.105	.658	47
Italy	2.925	.969	48
Total	3.415	.870	494

When the degrees of influence on certain questions within a country are ranked, the picture is relatively similar in all countries. Decisions on which subordinates have very little influence are the establishment of new business, compensation policy and rewards within BU, project/program financing and extension/enlargement investments. Decisions on which subordinates have most influence are work process arrangements within the BU, choosing and contracting customers and choosing and contracting suppliers. The mean score for each individual decision can be seen in Appendix 6.

4.5.3 Usage of Formal Rules and Procedures

All items of construct E4 were merged together to illustrate the overall extent of the usage of formal rules and procedures. Welch's test reveals that there are statistically significant differences in the means (p=0.00). According to Games-Howell post hoc test, Austria (5.623) is statistically significantly different from all of the other countries. In Addition, Australia (4.853), the country with the second highest mean score, differs significantly from Finland (3.757), Germany (4.228) and Italy (4.029). Finland, with the lowest mean score, differs significantly from all other countries but Belgium (4.243), Germany (4.228) and Italy (4.029). Australia and Italy are the only countries in which the mean score is higher for small organizations but the differences are minimal. The biggest differences between small and large organizations can be found in Belgium (4.073; 5.286) and Poland (4.407; 5.714). These afore mentioned differences are statistically significant. The mean scores for the usage of formal rules and procedures can be found in table 33 below.

Table 33. Usage of Formal Rules and Procedures

Country	Mean	Std. Dev.	N
Austria	5.623	0.997	51
Australia	4.853	0.926	50
Denmark	4.695	1.163	120
Norway	4.650	0.879	68
Sweden	4.634	1.254	120
Poland	4.590	1.115	50
Belgium	4.243	0.968	50
Germany	4.228	0.996	87
Italy	4.029	1.356	62
Finland	3.757	1.082	96
Total	4.489	1.188	754

4.5.4 Importance of Management Process, Organization Design and Rules and Procedures in Guiding Subodinate Behavior

Construct E5 measures the overall importance of the management process, the organization design and the rules and procedures in guiding subordinate behavior. Management process refers to management meetings like in construct E1. Organization design refers to organization structure which is normally described by an organization chart but it is also related to internal arrangements dealing with information transparency (construct E2) and authority structure (construct E3). Rules and Procedures refer to construct E4.

Management process seems to be most important in Australia, Austria, Belgium, Denmark, Finland and Germany. Organization design is most important in Norway and Sweden. In Italy and Poland, rules and procedures have received the highest mean score. Before drawing any further conclusions of these relative importances, the statistical significance must be tested.

According to the Games-Howell post hoc test, the mean score for Management Processes is statistically significantly different in Austria (6.314) compared with all other countries except for Finland (5.906).The mean score of Finland is significantly different from the ones with the lowest scores – Denmark (5.158), Germany (5.322). Italy (5.000) and Sweden (5.367). When it comes to organization design, the Games-Howell post hoc test reveals that Austria (4.392), the country with the lowest mean score, is significantly different from Australia, Belgium, Finland, Norway and Sweden. Norway and Sweden, with the highest mean scores, are different also from Denmark, Germany and Italy. Finally, the mean score for the importance of rules and procedures is most different from others in Finland (4.292). Finland, with the lowest mean score, differs significantly from Australia, Austria, Denmark, Germany, Italy and Poland. The mean scores can be seen in table 34 below.

Table 34. Importance of Management Process. Organization Design and Rules and Procedures in Guiding Subordinate Behavior

	Management Processes			Organization Design			Rules and Procedures		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Austria	6.314	0.990	51	4.392	1.471	51	5.039	1.455	51
Finland	5.906	1.106	96	5.271	1.504	96	4.292	1.436	96
Belgium	5.620	1.008	50	5.300	1.055	50	4.320	1.220	50
Australia	5.540	0.973	50	5.280	1.089	50	5.080	1.307	50
Norway	5.471	1.165	68	5.632	0.845	68	4.956	1.251	68
Poland	5.420	1.052	50	5.140	1.229	50	5.500	1.111	50
Sweden	5.367	1.270	120	5.683	1.085	120	4.842	1.257	120
Germany	5.322	1.166	87	5.080	1.213	87	5.276	1.255	87
Denmark	5.158	1.360	120	5.075	1.217	120	4.917	1.476	120
Italy	5.000	1.630	62	4.984	1.324	62	5.081	1.346	62
Total	5.472	1.253	754	5.227	1.256	754	4.902	1.366	754

The importance of management process is statistically significantly higher in large organizations in Denmark (4.978; 5.724) and in Poland (5.302; 6.143). Organization design, on the other hand, seems to play a significantly bigger role in small (5.180) than large (4.667) Italian organizations. For all other countries, there are no statistically significant differences in the mean scores between small and large organizations for any of these variables.

4.6 F – Organization Culture and Values

4.6.1 Promotion Culture

The promotion culture of organizations is examined through construct F1's items a) to what extent are promotions made from within the organization and b) to what extent is subordinate rotation between various positions seen as an important precondition for promotion. When it comes to the extent to which promotions are made from within the organization, the only statistically significant difference can be found between Australia (5.620) and Sweden (4.882). Overall, it seems that promotions are made from within the organization to a relatively high extent. This item does not, however, reveal whether there are differences between promotions to different organization levels. When it comes to job rotation, Germany (2.770) differentiates itself from all other countries except for Austria (3.235). Poland (4.800), the country with the highest mean score is statistically significantly different from Austria, Denmark, Germany, Italy, Norway and Sweden. The mean scores for these two promotion-related items can be seen in table 35 below.

Table 35. Promotion Culture

	Promotions from within			Job rotation		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Australia	5.620	0.967	50	3.880	1.599	50
Austria	5.412	1.314	51	3.235	1.904	51
Poland	5.380	1.159	50	4.800	1.385	50
Belgium	5.240	1.205	50	4.200	1.539	50
Finland	5.156	1.259	96	4.240	1.456	96
Denmark	5.133	1.216	120	3.875	1.515	120
Norway	5.103	1.081	68	3.824	1.403	68
Italy	5.065	1.266	62	3.661	1.568	62
Germany	5.057	1.409	87	2.770	1.452	87
Sweden	4.882	1.151	119	3.950	1.545	119
Total	5.154	1.224	753	3.823	1.600	753

The mean score for the importance of job rotation is higher in large organizations in all countries. Statistically significant differences can be found in Belgium (4.000; 5.429), Germany (2.514; 3.824), and Sweden (3.747; 4.750). For promotions from within, there are no statistically significant differences between small and large organizations in any country.

4.6.2 Socialization

Items f) training and development processes, g) social events and functions and h) mentoring, orientation and induction programs of construct F1 correlate strongly ($r > 0.5$) with each other. A new construct is created from these items to represent the extent to which socialization is used as a control device. According to the Games-Howell post hoc test, Italy (3.550) differs

from all countries but Germany (4.238) and Poland (4.293) on a statistically significant level. Sweden is the only country in which the difference in the mean score of small (4.453) and large (5.125) organizations is statistically significant. The mean scores for this construct can be seen in table 36 below.

Table 36. Socialization

Country	Mean	Std. Dev.	N
Belgium	4.747	0.835	50
Australia	4.740	1.173	50
Denmark	4.606	1.083	120
Sweden	4.588	1.087	119
Austria	4.536	1.363	51
Finland	4.500	1.051	96
Norway	4.456	1.052	68
Poland	4.293	0.993	50
Germany	4.238	1.142	87
Italy	3.550	1.480	60
Total	4.442	1.161	751

4.6.3 Formality of Mission and Vision Statements

Construct F2 is concerned with value-, mission- and vision statements of organizations. Item F2a measures how formally the values and purpose of the SBU are codified in formal documents. Item F2e, on the other hand, measures the same thing for the direction of the SBU. When it comes to the formality of the mission statement, there are two countries that go apart from the rest. Norway (6.265) has the highest mean score and it is statistically significantly different from all other countries but Austria (6.137). Italy (4.000), on the other hand, has by far the lowest mean score and is statistically significantly different from all countries except for Belgium (4.940), Germany (4.897) and Poland (4.860). When it comes to the formality of the vision statement, the mean score for Austria (6.353) is statistically significantly different from everyone else but Belgium (5.520) and Norway (5.721). Germany (4.621) and Italy (3.984), on the other hand, are different from Austria, Belgium, Denmark, Finland and Norway. In Austria and Germany, both of the statements are significantly more formal in large organizations. Mean scores for the formality of mission- and vision statement can be seen in table 37 below.

Table 38. Formality of Mission and Vision Statements

	Mission Statement			Vision Statement		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Norway	6.265	1.074	68	5.721	1.291	68
Austria	6.137	1.721	51	6.353	1.278	51
Denmark	5.508	1.680	120	5.383	1.578	120
Finland	5.313	1.496	96	5.615	1.260	96
Sweden	5.311	1.522	119	5.042	1.591	119
Australia	5.280	1.819	50	4.980	1.922	50
Belgium	4.940	2.034	50	5.520	1.432	50
Germany	4.897	1.811	87	4.621	1.672	87
Poland	4.860	1.761	50	5.360	1.699	50
Italy	4.000	1.959	62	3.984	1.895	62
Total	5.272	1.756	753	5.232	1.655	753

4.6.4 Usage of Mission and Vision Statements for Guiding Subordinate Actions

Items F2d and F2h ask the managers the extent to which they count on their mission- and vision statements in guiding the actions of their subordinates. The other way around: this construct can reveal whether the statements are used for actual control purposes or are they just more or less ritualistic. When it comes to the mission statement, Sweden's mean score of 4.008 is statistically significantly different from that of Belgium (5.200), Denmark (4.692), Germany (4.793) and Poland (5.260). Australia (4.340) and Italy (4.242) have low mean scores as well, but according to the Games-Howell post hoc test, these differences are not statistically significant. Judging from the magnitude of mean scores, Belgian and Polish organizations seem to actually use the mission statement as a control tool. When it comes to the vision statement, Austria (5.569), Belgium (5.520) and Poland (5.420) are statistically significantly different from all other countries. The only statistically significant difference between small and large organizations can be found in Germany where the mean score for the usage of the vision statement is significantly higher in large organizations (4.200; 5.118). The mean scores for both items can be seen in table 39 below.

Table 39. Usage of Mission and Vision Statements for Action Guiding Purposes

	Mission Statement			Vision Statement		
Country	Mean	Std. Dev.	N	Mean	Std. Dev.	N
Poland	5.260	1.291	50	5.420	1.372	50
Belgium	5.200	1.262	50	5.520	0.953	50
Austria	4.882	2.026	51	5.569	1.735	51
Germany	4.793	1.268	87	4.379	1.616	87
Finland	4.708	1.576	96	4.729	1.546	96
Denmark	4.692	1.608	120	4.442	1.608	120
Norway	4.456	1.275	68	4.338	1.431	68
Australia	4.340	1.768	50	3.700	1.854	50
Italy	4.242	1.616	62	4.113	1.738	62
Sweden	4.008	1.623	119	4.378	1.557	119
Total	4.600	1.582	753	4.588	1.639	753

4.6.5 Importance of Culture and Values in Guiding Subordinate Behavior

Construct F3 measures the overall importance of culture and values in guiding subordinate behavior. According to the Games-Howell post hoc test there are some statistically significant differences in the mean scores between countries. First of all, Germany (5.322) and Italy (5.115), the countries with the two lowest mean scores, are significantly different from Australia (5.960), Austria (6.157), Belgium (6.060) and Norway (5.882). In addition, Finland (5.865) is statistically significantly different from Italy (5.115). Poland (5.380) is different from Austria (6.157) and Belgium (6.060). Overall, culture and values seem to be very important in guiding subordinate behavior. The mean scores can be seen in table 40 below.

Table 40. Importance of Culture and Values in Guiding Subordinate Behavior

Country	Mean	Std. Dev.	N
Austria	6.157	1.189	51
Belgium	6.060	.978	50
Australia	5.960	.947	50
Norway	5.882	.873	68
Finland	5.865	1.120	96
Sweden	5.824	1.022	119
Denmark	5.717	1.154	120
Poland	5.380	1.086	50
Germany	5.322	1.280	87
Italy	5.115	1.550	61
Total	5.719	1.166	752

Culture and values are deemed significantly more important in large organizations in Denmark (5.593; 6.103) and in Germany (5.143; 6.059). For other countries, there are no statistically significant differences between small and large organizations.

5. DISCUSSION

In this section, the findings of the quantitative analysis will be summarized and discussed. The subsections follow the MCSP typology by Malmi and Brown (2008). Chapter 5.1 is concerned with strategic planning (Section A in questionnaire) and short-term planning (B). Chapter 5.2 discusses cybernetic systems (C). Chapter 5.3 summarizes rewards- and compensation systems (D). Administrative controls (E) and cultural controls (F) will be discussed in chapters 5.4 and 5.5, respectively.

5.1 Planning Controls

In seven out of ten countries, short-term (action) planning is deemed more important in guiding subordinate behavior than long-term (strategic) planning. The countries in which strategic planning is deemed more important are Belgium, Finland and Sweden. In general, both small and large organizations deem short-term planning more important than strategic planning. The main findings on practices related to both types of planning will be discussed in more detail below.

There is variation between countries when it comes to the strategic planning horizon. In none of the countries, the average planning horizon exceeds five years. In general, the average strategic planning horizon is longer in organizations with over 2 000 employees, and statistically significant differences between small and large organizations could be found in two countries. An average horizons of over five years could be found only in large organizations of some countries.

The extent to which the objectives produced by the strategic planning process are qualitative and quantitative are more or less equal within small and large organizations in all countries. Finland has the highest mean score for both items suggesting that strategic objectives are explicitly defined. The high mean score for the extent of qualitative objectives supports Malmi and Brown's (2008) remark on the fact that planning can be done with little reference to finance. In similar vein, there are differences between countries in how specifically defined strategic ends and means are. The more specific the targets are, the more effective they are as a control device (Flamholtz et al., 1985; Merchant & Van der Stede, 2007). This study does not, however, address "target balance" (Bloom & Van Reenen, 2010) i.e. whether there are only financial or both financial and non-financial targets. The updating frequencies of ends and means produced

by the strategic planning process vary to some extent between countries. In general, both ends and means are reviewed more frequently than revised.

When it comes to the strategy formation process, most of the countries have a relatively strict top-down practice and involving more than one level of managers below the top management of the strategic business unit is uncommon in the majority of countries. More managerial levels are involved in the formation process of means compared with ends. This finding suggests that degree of centralization of strategic planning is generally high (Siriyama, 2007). The highly centralized strategic planning process opposes Ferreira and Otley's (2009) notion of greater organizational alignment when lower managerial levels are involved. When it comes to the general importance of strategic planning in guiding subordinate behavior, Finland and Belgium separate themselves from the rest of the countries with significantly higher mean scores.

When strategic planning practices are considered, Austria and Finland are the most different from other countries. Austrian organizations do not deem strategic planning as an important control device but their strategic planning process creates explicit and specific objectives. In Finland, on the other hand, strategic planning is deemed extremely important. Objectives of the process are explicit and specific and strategy is frequently updated. Moreover, lower managerial levels are involved in the planning process.

As explained earlier, short-term planning is deemed important in all countries. When it comes to the process of translating strategy into short-term plans, top management plays a crucial role. Finnish organizations give more freedom to subordinates compared with countries with a tighter top-down approach. In four countries, the process is more top-down in large organizations. In six countries, consequently, top management plays a bigger role in small organizations. The differences between small and large organizations were statistically significant only in one country. When it comes to the short-term target setting process, objectives are set similarly in all countries and all sized organizations- the most common approach is top management setting the targets and revising them in negotiations with subordinates. More responsibility is given to subordinates for target setting of short-term means. In the light of Flamholtz et al.'s (1985) suggestion on participation in goal setting increasing the performance, top management plays a surprisingly big role.

For short-term plans, targeted performance is updated least frequently and there are statistically significant differences between countries on the update frequencies of action plans and resource

commitments. Size of the organization does not affect the update frequencies on a statistically significant level.

When it comes to short-term planning, Italy differs from others mostly because the translation of strategy into short-term plans as well as short-term target setting processes are heavily top-down. Finnish organizations, on the other hand, involve lower managerial levels in the short-term planning processes. Like strategic planning, Finnish and Austrian organizations deem short-term planning as extremely important.

5.2 Cybernetic Controls

Section C) Performance measurement and evaluation of the questionnaire reflects the cybernetic controls of MCSP typology.

Both budgets and extended performance measurement systems, or hybrids, (e.g. BSC) are used for guiding and controlling subordinate behavior in over 95 % of the organizations. This comes as no surprise since especially budgeting is an essential MCS in most organizations (Malmi & Brown, 2008; Otley, 1999) and usage of BSC is very common in modern organizations (Ittner & Larcker, 1998). Both budgets and performance measurement systems are used diagnostically to a higher extent than interactively. There are numerous statistically significant pair-wise differences for the extent of diagnostic and interactive usage of both types of systems. Relatively high scores for both types of usages could possibly be justified with Ferreira and Otley's (2009) finding that performance measurement systems are most effective when used both diagnostically and interactively. When it comes to budgets, however, Grabner and Moers (2013) argue that diagnostic and interactive usage are substitutes of each other – the benefits of using budgets diagnostically decreases with interactive usage and vice versa. After all, assessing whether these systems should be used to a higher extent one way or another is not central to this study since the main focus is in describing the practices. Both small and large organizations use these systems to a higher extent diagnostically and statistically significant differences between different sized organizations could not be found.

Of the cost controlling methods employed by organizations, traditional budgets are still very common. Australia is the only country in which around half of the organizations employ modern cost control methods. Usage of tighter traditional budgets is more common for capital expenditures whereas operating expenses are controlled with looser budgets or alternative methods to higher extent. In general, the usage of traditional budgets is more common in large

organizations. Even though academia has identified the pitfalls in the usage of traditional budgets (Hansen et al., 2003), the results suggest that they are still widely adopted in the organizations.

In all countries except for Norway, performance measurement is based on financial measures to a higher extent than on non-financial measures. The extent to which performance measurement is based on non-financial measures is similar for all countries regardless of the size of the organization. For financial measures, however, there are statistically significant differences between several countries. In addition, large organizations put more emphasis on financial measures and the differences between small and large organizations are statistically significant in four countries. One potential reason for why performance measurement is based less on non-financial measures could be that their alignment across organizational levels might appear intricate (Ferreira & Otley, 2009).

There are significant variations in how often organizations in different countries formally update leadership performance and business performance. In their study on management practices across countries, Bloom and Van Reenen (2010) argue that one trace of well-managed companies is a continuous tracking of performance. Before concluding that leadership performance and business performance is, on average, updated too seldom (not continuously) in all of the countries, it has to be noted that this construct measures only formal evaluations. Informal evaluations might or might not take place on a day-to-day basis – this was not measured in the questionnaire.

Overall, cybernetic controls are deemed extremely important in all countries, by both small and large organizations. Similarly to planning, performance measurement and evaluation is considered extremely important especially in Finnish and Austrian organizations. The most diverging practices can be found in Austria and Italy. In Austria, CAPEX is controlled through tight traditional budgets and budgetary and performance measurement systems are used to a high extent both diagnostically and interactively. Italian organizations, on the other hand, do not find cybernetics as important compared with other countries. Moreover, budgetary and performance measurement systems are rarely used interactively in Italian organizations.

5.3 Rewards and Compensation Controls

When the nature of rewarding is measured on the financial–non-financial dimension, statistically significant differences occur between countries. In all countries, the nature of rewarding is financial to a higher extent. Financial rewards being dominant comes as no surprise since money, in general, is valued by employees and as a consequence, it is a common form of incentive (Merchant & Otley, 2007). Even though the differences between small and large organizations are not statistically significant in any country, a general pattern seems to be that rewarding is to a higher extent financial in large organizations. The highest score for financial rewarding was found in Finland. An interesting addition to the questionnaire would have been a construct measuring the managers' perception on the effectiveness of financial rewarding since Bonner and Sprinkle (2002) argue that the evidence on the effectiveness of monetary incentives on performance is mixed.

Different purposes (committing, motivating and directing attention) of financial and non-financial rewards have varying importance in different countries and large number of statistically significant differences were found. Also the size of the organizations affects the perceived importance of different purposes. The idea of monetary incentives being motivational (Bonner & Sprinkle, 2002) is supported by the finding of motivation being of high importance in all countries. Merchant and Otley (2007) argue that employee retention can be one purpose of a reward system. However, commitment can be built for other things than sole retention, such as strategy. Also the frequency for receiving the rewards (Merchant & Otley, 2007) could be examined in the future in order to understand whether it affects the effectiveness of retaining and motivating employees.

There are numerous statistically significant differences when it comes to whether organizations use financial, non-financial or both measures in determining the financial rewards of subordinates. Interestingly, Finnish organization use both types of measures to a significantly higher extent than its Nordic counterparts – Sweden, Norway and Denmark. Usage of both types of measures is more common in large organizations in the majority of countries.

Bonner and Sprinkle (2002) argue that specifying the weights of compensation to each performance measure is important. To keep the analysis lucid, the weights of every single measure used in every country were not examined. When it comes to the average weight of financial and non-financial measures in the rewarding formula, there are no statistically

significant differences between countries. The average weight of financial measures is higher in all of the countries. In general, the weight of financial measures is higher in large organizations but the differences are significant only in one country. In every country, the most popular financial measure is profit-related whereas the most popular non-financial measure varies. The maximum performance-based bonus as a % of the annual base salary varies greatly between different countries. In four countries, the average percentage is significantly higher in small organizations. A statistically significant positive correlation could be found between the average maximum bonus and the extent to which rewarding is financial.

Overall, rewards and compensation are not deemed nearly as important control devices as planning and cybernetics. Finnish and Austrian organizations find rewards and compensation systematically more important and the difference to countries with the lowest scores is quite significant. In Denmark and Poland, rewards and compensation are deemed significantly more important in large organizations. Compared with other countries, Finland emphasizes financial rewards and finds several purposes for both financial and non-financial rewarding important. In Danish organizations, on the other hand, the general importance of rewards and compensation is low and especially non-financial rewards seem not to be of essence. It is important to notice that negative rewarding (Merchant & Otley, 2007) is not encompassed in the questionnaire.

5.4 Administrative Controls

The information exchange environment of organizations was explored through the stability and broadness of management groups. The broadness and stability of management groups are indicative of the internal management governance structure (Abernethy & Chua, 1996). Statistically significant differences could be found between several countries but generally, management groups are stable in all countries. Also the broadness of management groups varies between countries. The size of the organization affects the stability and broadness of management groups differently in different countries.

The degree of influence the top management has on business decisions varies significantly between countries. When all decisions included in the questionnaire were examined, top management had greater influence in all of the countries. In Belgium and Finland, however, the influence was nearly equal. In all of the countries, the average overall influence of subordinates is higher in large organizations and the differences were statistically significant in two

countries. In all countries, subordinates have the least influence on decisions related to business expansion, compensation and financing. On the other hand, subordinates do have relatively much influence on arranging work processes as well as contracting customers and suppliers.

Formal rules and procedures are used as a control mechanism differently between countries. Austrian organizations apply formal rules and procedures to an extremely high extent compared with others. Finland is the other extreme with a low emphasis on formal rules and procedures. In line with Daft's notion (1987), formal rules and procedures are used to a higher extent in large organizations and statistically significant differences could be found in two countries.

When the overall importance of management process, organization design and rules and procedures is measured, there are differences between countries. In Norway and Sweden, organization design is deemed most important. Italy and Poland, on the other hand, rank rules and procedures on the top. In the rest of the countries, management processes are deemed most important. The differences in the importance of the management process are statistically significant between countries – especially Austria and Finland stand out with high mean scores. Importance of organizations design is significantly different from other countries in Sweden and Norway. Finland finds rules and procedures least important compared with others. Statistically significant differences between small and large organizations could be found in a couple of countries but no explicit pattern in importance of these three items exists.

5.5 Cultural Controls

There are some differences in the promotion cultures between countries. Compared with other countries, promotions are made to a lower extent from within the organization in Sweden. According to Merchant and Van der Stede (2007), individuals become more familiar with the culture of the organization through intra-organizational transfers. Job rotation as a precondition for promotion is not, however, deemed as very important in any of the countries except for Poland. Job rotation is more important in large organizations and statistically significant differences could be found in three countries.

The socialization process aims at promoting a certain set of values within the organization (Flamholtz et al., 1985). Training (one item in the socialization construct) can be viewed as a way of steering the culture of an organization (Malmi & Brown, 2008). When it comes to the extent to which socializing activities are applied, some differences between countries could be found. Socialization is not used to a very high extent in any of the countries but Italy separates

itself with clearly the lowest emphasis. Differences between small and large organizations are not statistically significant in any country.

According to Simons (1994), beliefs systems are communicated through formal documents. The formality levels of mission and vision statements vary greatly between countries. Mission statements are extremely formal in Norway and Austria whereas Italy and Poland stand out with clearly the lowest formality. Austrian organizations have extremely formal vision statements compared with others. Both statements are more formal in large organizations on a statistically significant level in Austria and Germany. Clan controls are often classified as informal, but formal mission and objective statements are examples of more formal controls that are linked to organization culture (Langfield-Smith, 1997). The finding of relatively high formality levels of both types of statements supports this view.

In addition to the formality of the mission and vision statements, their usage for subordinate action guiding purposes varies between countries. The idea was to examine whether the statements are used for actual control purposes or are they purely ritualistic. As Malmi and Brown (2008, p. 294) argued, culture is a control systems "when it is used to regulate behavior". Swedish managers rely on their mission statement in guiding subordinate behavior the least whereas in Belgium and Poland they are used to a higher extent. The vision statement is used to the highest extent in Austria, Belgium and Poland and the differences between them and other countries are statistically significant. Size of the organization does not generally affect the usage of either of the statements on a statistically significant level.

Overall, culture and values are deemed extremely important in guiding subordinate behavior but there are some statistically significant differences between countries. In Italy and Germany, culture is not emphasized to the same extent as in other countries. Large organizations deem culture significantly more important in two countries. What is important to notice is, however, that the concept of organizational culture is intricate (Dent, 1991) and researchers have yet to form a concensus on its definition (Hofstede et al., 1990). Thus, measuring the type or nature of organizational culture as well as its importance for guiding subordinate behavior requires further research.

5.6 Overall Similarity of Management Control Practices Between Countries

An attempt was made to group countries with similar overall management control practices by utilizing the cluster analysis function of SPSS. There are, however, some issues regarding the cluster analysis. What variables or constructs should be included in the analysis? If all (or majority of) the studied constructs are included, there are two main problems. First of all, not all organizations of a particular country belong to the same cluster. In other words, regardless off the fact that countries are different on a statistically significant level in several ways, they cannot be grouped uniformly when all constructs are considered. Secondly, if a large number of constructs is used, the analysis reveals that the quality of the generated clusters (measured with cohesion and separation) is poor.

Reducing the number of constructs for the cluster analysis possesses some problems as well. In one attempt, the constructs measuring the overall importances of each section (A-F) were used. The first problem here is that do these particular constructs reflect the other constructs within the section accurately enough? Perception of importance does not necessarily reveal anything about the actual control practices. Secondly, if the number of constructs used is very small, the analysis can not find any real differences between different clusters. Also this approach has the problems of countries including organizations from different clusters as well as poor cluster quality.

Finally, if using large amount of constructs is problematic and the constructs measuring the overall importance of control elements are too vague, what should be used instead? How can one determine how many constructs to use and especially which constructs to include in order to achieve a composition in which everything essential is included and anything important is not left out? Moreover, how would one ensure that all elements of the MCS package receive equal attention in the analysis. Even further, should the elements receive similar emphasis or should something be left with smaller attention?

The questions above can be answered through a delicate and well planned statistical analyses. The main purposes of this very study are, however, to describe the management control practices found in 10 countries and discover whether significant differences can be found. Thus, identifying countries with similar overall profiles will be left for future research to answer.

One rough and simple way of approaching the similarity (or difference) between countries is to look at the number of constructs with statistically significant differences. Even though this approach does not ultimately tell us which countries have overall similar management control practices, it provides some indication. The biggest total number of pair-wise significant differences against other countries could be found in Finland, Italy and Austria. As explained in the results section, Finnish and Austrian organizations differ from other countries especially when it comes to planning and cybernetic systems. Italian organizations, on the other hand, are very different from those of other countries especially in usage style of budgets and performance measurement systems. The lowest total number of significant differences can be found in Australia, Belgium and Poland. This does not mean that these countries would be similar. Instead, it indicates that management control practices in these countries deviate, statistically speaking, the least from other countries. In Appendix 7, a table in which the highest and lowest total number of significant pair-wise differences for each country is presented.

5.7 Overall Similarity of Management Control Practices in Small and Large Organizations Within Countries

As mentioned earlier, this study did not explore the differences in the management control practices between the small and large organizations of the whole population. Instead, the analysis was always conducted within a country. Clustering small and large organizations within each country to identify some sort of archetype of management control possesses the same pitfalls as country clustering – which constructs to use and how to weigh them? Another problem is that when the observations within a country are split to small and large organizations using the number of large organizations is too low for reliable cluster analysis.

There is not one right answer to how many groups should the organizations be split determined by the number of employees. Since studying differences between different sized organizations was not the principal research question in this study, it was determined that in order to keep the analysis simple, two groups would be enough. The reason for setting 2 000 employees as the threshold is justified in Section 3.1. Regardless of the level of threshold, this type of classification is always artificial to some extent – what is the difference between an organization that employs 1 999 employees and an organization with 2 001 employees? Granted, the analysis would be more fruitful if only the very small and very large organizations would be compared.

Overall, the number of statistically significant differences between small and large organizations found in this study low. The highest number of significant differences could be found in Denmark and Germany. In Denmark, especially purposes for both financial- and non-financial rewarding differed between small and large organizations. In Germany, on the other hand, differences could be found in strategic planning, cybernetics and especially organization culture. In Australia and Finland, only two of the studied constructs received significantly different scores in small and large organizations. In conclusion, it seems that the size of the organization, with 2 000 employees as the threshold, affects the management control practices very little. The number of observed significant differences in each country can be seen in Appendix 8.

6. CONCLUSIONS

The purpose of this study was to describe the management control practices found in the organizations of the ten countries that have participated in an international research project called Effective Management and Control Systems. Moreover, this study explored whether the practices between countries as well as between small and large organizations within countries would differ on a statistically significant level.

In addition to the accurate description, there are two main findings. First of all, management control practices differ remarkably in organizations from different countries. Even though this study did not address the overall MCS packages, numerous statistically significant differences could be found within all of the package elements. The biggest number of differences in the practices could be found within administrative, rewards and compensation as well as cybernetic control systems. In the pair-wise comparisons, Finland, Austria and Italy differed from other countries, on a statistically significant level, most often.

Secondly, the practices of small and large organizations, with 2 000 employees as the threshold, were found to be very similar. The number of statistically significant differences in the practices was very low in all of the countries. Countries in which the most variation could be found were Denmark and Germany.

Even though occasionally touching on macro level issues, this study has its principal focus on micro level (Granlund & Lukka, 1998). Instead of focusing on the broad concepts or ideas of management accounting, the actual control practices taking place in organizations have been studied. This thesis does not take a stand on the debate characterizing cross-cultural management research: how should culture be defined, treated and controlled for (Bhimani, 1999; Chow et al., 1999; Harrison & McKinnon, 1999). Instead, the descriptive and comparative approach of this study relates it to the research stream outlining differences between countries (Bhimani, 2006). The description also contributes to the research project Effective Management and Control Systems by covering the whole international dataset. As explained earlier in the literature review, this study did not apply a theoretical preconception on whether differences between countries would be expected to be found or not. This is due to the fact that researchers are yet to agree between the relationship between national culture and management control system design (Chow et al., 1999; Harrison & McKinnon, 1999; W. Van der Stede, 2003).

This study has several limitations and it cannot completely fend off the critique directed to cross-cultural MCS research. First of all, organizations from different countries were examined at face value. In other words, other characteristics of the organizations (such as industry, owner base or profitability) were not controlled for. On the other hand, such rigour would not have allowed an analysis this extensive in the scope of a master's thesis. As a notion, initial statistical tests indicated that industry has a minimal effect on management control practices. Secondly, the questionnaire as well as the interpretation of the results rely heavily on the MCSP typology by Malmi and Brown (2008). Even though the typology has synthetized decades of management control system research, there is still a possibility that the perspective is biased. Moreover, the framework is yet to be widely applied and tested in empirical research. Thirdly, since the writer of this thesis did not participate in the data collection process, objectively assessing the quality of the data is somewhat difficult. One principal concern is that the similarity of individual interview situations can not be evaluated afterwards. In writer's opinion, it is possible that not enough support and advice can be given via phone. The writer also believes that the interviewer's varying expertise and commitment to the project has possibly had a significant effect on the interviewee's answers. Canada was left out of this study because of suspicions of defective data.

Several questions for future research have arisen from this study. First of all, extending the research project to more countries would provide a fruitful avenue for finding out whether differences in management control practices exist between geographical or cultural regions. As an example, extensive comparative study on management control practices between U.S and Euoropean organizations would be interesting. Secondly, future research should continue conceptualizing, defining and controlling for national culture more explicitly. Only this way can the real relationship between national culture and management control system design be discovered. Thirdly, instead of focusing on control elements or practices separately, future studies should more strongly encompass the whole package. How do organizations in different countries configure their MCS packages? Are there differences in the relationships between the package elements in organizations from different countries? Finally, if it is not the country alone, what are the characteristics that truly drive the variety of management control system packages of organizations?

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APPENDICES

Appendix 1. Questionnaire

EFFECTIVE

MANAGEMENT AND CONTROL SYSTEMS

Confidential International Survey Research

2010-2011

Section A. Strategic Planning Content and Process

A1. Please indicate how many years is the strategic planning period in your SBU.

1 2 3 4 5 6 7 8 9≤ years

A2. Please indicate how much weight your SBU's strategic planning puts on specifying…

	Not at all						Very significantly
a. objectives	1	2	3	4	5	6	7
b. ways of creating competitive advantage	1	2	3	4	5	6	7
c. programs and resources	1	2	3	4	5	6	7

d. Please indicate what comes first. second. third and fourth in your strategic planning process. Please number 1.-4. or mark N/A. if an alternative does not fall in the domain of your strategic planning.

_____ strategies _____ resources _____ core competencies _____ objectives

A3. Please indicate to what extent your SBU's strategic planning produces ends and means that are:

	ENDS							**MEANS**						
	Not at all						Very high extent	Not at all						Very high extent
a. Qualitative (e.g.. vision. strategic intent. new markets. new technologies)	1	2	3	4	5	6	7							
b. Quantitative (e.g. EVA. ROCE. Turnover. market share. brand value)	1	2	3	4	5	6	7							
c. Detailed (e.g. it is clearly outlined what to aim at or how to proceed)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
d. Accurate (e.g. achievement / implementation can be determined with confidence)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
e. Documented (i.e. written down)	1	2	3	4	5	6	7	1	2	3	4	5	6	7

A4. Please indicate how often your SBU's strategic ends and means are reviewed and revised. (Please check one box in each column)

1. Monthly		
2. Quarterly		
3. Three times a year		
4. Twice a year		
5. Once a year		
6. Every second year		
7. Every third year or less frequently		

A5. Please indicate who participates in the **formation** of your SBU's strategic ends and means (Please check one box in each column)

	ENDS	MEANS
1. Top management of SBU with corporate management		
2. Only top management of the SBU		
3. Only SBU management. including one level of managers below SBU top mgt		
4. Only SBU management. including two levels of managers below SBU top mgt		
5. More than two levels of managers below SBU top mgt		
Please also check here if support functions are participating (0 = empty . 1 = if checked)		

Not at all Very important

A6. How important is strategic planning in guiding and directing subordinate behaviour? 1 2 3 4 5 6 7

Section B. Short-term Planning Content and Process

B1. Please indicate how strategic ends and means are translated into **short-term action plans** in your SBU. (Please check one box)

1.	Action plans are decided at the top and given to lower level to be implemented	
2.	Important areas of action are defined at the top and subordinates are required to develop specific action plans	
3.	Action plans arise in intensive negotiations within planning guidelines given from the top	
4.	Action plans are based on subordinates' interpretations of how to affect upper level strategic objectives	
5.	Subordinates autonomously determine actions within strategic themes along the business	

B2. Please indicate how short-term targets are set in your SBU (Please check one box in each column)

		ENDS	MEANS
1.	Top management sets targets and passes them to subordinates		
2.	Top management sets targets. but revises them in negotiations with subordinates		
3.	Targets setting is quite long. iterative negotiation process between organizational levels		
4.	Subordinates set autonomously targets. but they are subject to top management acceptance		
5.	Subordinates set targets autonomously with little. if any. management involvement		

B3. Please indicate how often targets. action plans and resource commitments are updated in your SBU

		TARGETED PERFORMANCE	ACTION PLANS	RESOURCE COMMITMENTS
1.	Almost continuously (i.e. weekly basis)			
2.	Monthly			
3.	Bimonthly			
4.	Quarterly			
5.	Three times a year			
6.	Biannually			
7.	Annually			

B4. Please indicate how important it is that subordinates' short-term plans contain information about…

	Not at all						Very important
a. progress schedule of activities. projects. programs	1	2	3	4	5	6	7
b. coordinating activities within and/or across the units	1	2	3	4	5	6	7
c. forming cross-functional projects and project teams	1	2	3	4	5	6	7
d. financial resource requirements	1	2	3	4	5	6	7
e. human resource requirements	1	2	3	4	5	6	7
f. skills and competency requirements	1	2	3	4	5	6	7
g. IT-resource requirements	1	2	3	4	5	6	7

	Not at all						Very important
B5. How important is short-term planning in guiding and directing subordinate behaviour?	1	2	3	4	5	6	7

Section C. Performance Measurement and Evaluation

C1. Please indicate how SBU top management seeks to control OPEX and CAPEX of the units managed by subordinates.

Expenses are…	OPEX	CAPEX
1. set fixed (e.g. fixed annual budget)		
2. set relatively fixed (e.g. additional budgets are rare but possible)		
3. set relatively flexible (e.g. additional budgets are common)		
4. flexible. they scale down / up with output volume (e.g. unit costs are monitored. €/unit)		
5. flexible. they scale down / up with sales revenue (costs are % of sales. ROI. ROCE)		
6. determined case by case		

C2. Does SBU top management use budgetary systems to guide and control subordinate behaviour (e.g. budgets. forecasts and variance analysis)? ____ Yes ___ No

Does SBU top management use performance measurement systems to guide and control subordinate behaviour (e.g. financial and non-financial measures)? ____ Yes ___ No

Please answer only to columns to which you answered **Yes** above. To what extent SBU top management use budgets **and/or** performance measurement systems for the following:

	Budgetary Systems	**Perf. Measurement Systems**
	Not at all … Very high extent	Not at all … Very high extent
a. Identify critical performance variables (i.e. factors indicating progress towards strategic objectives)	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Set targets for critical performance variables	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Monitor progress towards and to correct deviations from preset performance targets	1 2 3 4 5 6 7	1 2 3 4 5 6 7
d. Provide a recurring and frequent agenda for top management activities	1 2 3 4 5 6 7	1 2 3 4 5 6 7
e. Provide a recurring and frequent agenda for subordinate activities	1 2 3 4 5 6 7	1 2 3 4 5 6 7
f. Enable continual challenge of underlying data. assumptions and action plans with subordinates	1 2 3 4 5 6 7	1 2 3 4 5 6 7
g. Focus attention on strategic uncertainties (i.e. threats and opportunities)	1 2 3 4 5 6 7	1 2 3 4 5 6 7
h. Encourage and facilitate dialogue and information sharing with subordinates	1 2 3 4 5 6 7	1 2 3 4 5 6 7

C3. Please indicate to what extent SBU top management bases subordinates' performance evaluation on:

Not at all … Very high extent

a. Financial measures 1 2 3 4 5 6 7

b. Non-financial measures 1 2 3 4 5 6 7

c. Detailed measures (e.g. budget line item. input volume. time. quality etc.) 1 2 3 4 5 6 7

d. Aggregate. summary measures (e.g. EBIT. Profit. ROI. ROCE. market share. brand value. brand image. total customer satisfaction. etc.) 1 2 3 4 5 6 7

e. Achievements in leadership behaviour 1 2 3 4 5 6 7

f. Actions and activities taken 1 2 3 4 5 6 7

g. Individual effort 1 2 3 4 5 6 7

h. For how many performance measures does SBU top management hold subordinates accountable?

C4. Please indicate to what extent SBU top management evaluates subordinates' performance in relation to…

	Not at all						Very high extent
a. Absolute. preset numbers (euros. time. %)							
b. Internal benchmarks (league table position)							
c. External benchmarks (league table position)							
d. Past performance (trend-based evaluation)							

C5. Please indicate how important the following purposes of performance evaluation are in your SBU:

	Not at all						Very important
a. Provide feedback for learning and continuous improvement	1	2	3	4	5	6	7
b. Determine subordinate compensation	1	2	3	4	5	6	7
c. Direct subordinates' attention to important issues	1	2	3	4	5	6	7

C6. Please indicate how often **formalized** performance evaluations (for determining compensation or providing individual feedback) are conducted in your SBU. (Please check one box in each column)

	LEADERSHIP PERFORMANCE	BUSINESS PERFORMANCE
1. Monthly		
2. Quarterly		
3. Three times a year		
4. Twice a year		
5. Once a year		
6. Less frequently than once a year		
7. Not applicable (N/A)		

	Not at all						Very important
C7. How important is performance measurement and evaluation in guiding and directing subordinate behaviour?	1	2	3	4	5	6	7

Section D. Rewards and Compensation

D1. **a)** Please name the most important performance measures for determining subordinates' financial rewards

b) Please indicate weight (%) of each measure in rewarding formula

c) Please indicate the level at which performance measure is calculated

C= Corporate

S = SBU

B = BU

P = Personal (leadership)

Measure 1:	Code %_____	_____
Measure 2: _____	_____	_____
Measure 3: _____	_____	_____
Measure 4: _____	_____	_____
Measure 5: Further measures listed in the template_	_____	_____

D2. Please indicate to what extent the following statements describe the way of evaluating and compensating subordinates' performance in your SBU

a. We determine weights of performance measures as the evaluation takes place	
b. We evaluate performance on the basis of quantitative metrics	
c. We adjust the amount of bonus based on actual circumstances	
d. We use predetermined criteria in evaluation and rewarding	

D3. Please indicate to what extent…

	Not at all Very high extent
a. Performance-pay contracts are customized for each subordinate	1 2 3 4 5 6 7
b. Financial rewards are shared evenly to subordinates (e.g. profit sharing)	1 2 3 4 5 6 7
c. Financial rewards increase as subordinate's performance exceeds targets	1 2 3 4 5 6 7
d. Rewarding is financial (bonuses. share-based rewards)	1 2 3 4 5 6 7
e. Rewarding is non-financial (e.g. recognition. promotion. training)	1 2 3 4 5 6 7

D4. How important are the following purposes of financial and non-financial rewarding in your SBU:

	Financial		**Non-financial**	
	Not at all Very important		Not at all Very important	
a. Committing subordinates	1 2 3 4 5 6 7		1 2 3 4 5 6 7	
b. Motivating subordinates	1 2 3 4 5 6 7		1 2 3 4 5 6 7	
c. Directing subordinates' attention	1 2 3 4 5 6 7		1 2 3 4 5 6 7	

D5. Significance of rewarding

a. How many percent of their total annual income can subordinates receive as performance-based bonuses in your SBU?

Percent (%) of annual salary

b. How important are rewards and compensation in guiding and directing subordinate behaviour?

Not at all Very important

1 2 3 4 5 6 7

Section E. Organisational Structure and Management Processes

E1. Please indicate how often different types of management groups convene (Please check one box in each column)

	Mgt groups within the SBU and BUs	Mgt groups across SBU and BU boundaries
1. Weekly		
2. Fortnightly		
3. Monthly		
4. Bimonthly		
5. Quarterly		
6. > Quarterly		

	Mgt groups within the SBU and BUs	Mgt groups across SBU and BU boundaries
To what extent are management group structures stable? (i.e. the same people form always the mgt group = stable)	Dynamic 1 2 3 4 5 6 7 Stable	Dynamic 1 2 3 4 5 6 7 Stable
How broadly based are management groups? (besides business unit managers. operative middle-level managers and/or experts participate = broad)	Narrow 1 2 3 4 5 6 7 Broad	Narrow 1 2 3 4 5 6 7 Broad

E2. Please Indicate To what extent subordinates…

	Not at all … Very high extent
a. have multiple reporting lines	1 2 3 4 5 6 7
b. assume roles besides managing a unit (e.g. heading quality development)	1 2 3 4 5 6 7
c. receive relevant information through informal discussions	1 2 3 4 5 6 7
d. receive relevant information through management information system	1 2 3 4 5 6 7
e. have free access to broad-scope information regarding the performance of business units and whole company	1 2 3 4 5 6 7

E3. Compare the **degree of influence** that SBU top management has to that of subordinates on the following decisions.

	SBU top mgt has all influence … equal … Subordinates have all influence
a. Establishment of new businesses	1 2 3 4 5 6 7
b. Development of new products/ services	1 2 3 4 5 6 7
c. Extension/ enlargement investments	1 2 3 4 5 6 7
d. Replacement investments	1 2 3 4 5 6 7
e. Project/program financing	1 2 3 4 5 6 7
f. Product/ service pricing	1 2 3 4 5 6 7
g. Distribution channel choice	1 2 3 4 5 6 7

h.	Choosing and contracting customers	1	2	3	4	5	6	7
i.	Choosing and contracting suppliers	1	2	3	4	5	6	7
j.	Prioritizing activities	1	2	3	4	5	6	7
k.	Compensation policy and rewards within the BU	1	2	3	4	5	6	7
l.	Hiring and firing employees within the BU	1	2	3	4	5	6	7
m.	Work process arrangements within the BU	1	2	3	4	5	6	7

E4. In guiding and directing subordinates' behaviour. to what extent does SBU top management

		Not at all						Very high extent
a.	use company wide codes of conduct or similar statements?	1	2	3	4	5	6	7
b.	review plans before action?	1	2	3	4	5	6	7
c.	employ written authorization levels and decision rules?	1	2	3	4	5	6	7
d.	make the sanctions of unethical business conduct known for subordinates (e.g. by written statements)?	1	2	3	4	5	6	7
e.	employ written guidelines that stipulate specific areas for. or limits on. opportunity search and experimentation?	1	2	3	4	5	6	7
f.	actively communicate in writing the risks and activities to be avoided by subordinates?	1	2	3	4	5	6	7
g.	apply sanctions to subordinates who engage in risks outside organisational policy. irrespective of the outcome?	1	2	3	4	5	6	7
h.	specify minimum requirements (e.g. ROI. implementation times) for business opportunities?	1	2	3	4	5	6	7

E5. How important are the following in guiding and directing subordinate behaviour?

		Not at all						Very important
a.	management processes	1	2	3	4	5	6	7
b.	organization design	1	2	3	4	5	6	7
c.	rules and procedures	1	2	3	4	5	6	7

Section F. Organization Culture and Values

F1. Please indicate to what extent…

	Not at all						Very high extent
a. are promotions made from within the organization?	1	2	3	4	5	6	7
b. is subordinate rotation between various positions seen as an important precondition for promotion?	1	2	3	4	5	6	7
c. are skills and technical competence of importance when recruiting for managerial positions?	1	2	3	4	5	6	7
d. are psychological tests and values of importance when recruiting for managerial positions?	1	2	3	4	5	6	7
e. is leadership-based performance connected to significant rewards (e.g. promotions. equity-based rewards)?	1	2	3	4	5	6	7
f. are training and development processes used to reinforce SBU objectives. expectations and norms?	1	2	3	4	5	6	7
g. are social events and functions used to develop and maintain commitment to the SBU?	1	2	3	4	5	6	7
h. are mentoring. orientation and induction programs used to acclimatise new managers to acceptable behaviours. routines and norms?	1	2	3	4	5	6	7

F2. Please indicate to what extent…

	Not at all						Very high extent
a. are the values and purpose of the SBU codified in formal documents? (e.g. value statements. credos. statements of purpose)	1	2	3	4	5	6	7
b. are formal statements of values used to **commit** subordinates to the long-term objectives of SBU?	1	2	3	4	5	6	7
c. are formal statements of values used to **motivate** subordinates in sharing responsibility?	1	2	3	4	5	6	7
d. do you count on value and mission statements guiding actions of your subordinates?	1	2	3	4	5	6	7
e. is the direction of the SBU codified in formal documents? (e.g. vision statement. statement of strategic intent)	1	2	3	4	5	6	7
f. is the vision statement so concise that your subordinates can remember it all the time?	1	2	3	4	5	6	7
g. is the vision statement so specific that it guides your subordinates to say 'no' for some business opportunities?	1	2	3	4	5	6	7
h. do you count on the vision statement guiding actions of your subordinates?	1	2	3	4	5	6	7

	Not at all						Very important
F3. How important are values and organization culture in guiding and directing subordinate behaviour?	1	2	3	4	5	6	7

Appendix 2. List of examined constructs. sections A-C

Section	Name	Construct in questionnaire	Items covered	Explanation
A	Strategic planning horizon	A1		Time horizon of strategic planning process
A	Nature of strategic objectives	A3	a, b	The extent to which strategic objectives of quantitative- and qualitative nature
A	Specificity of strategic ends and means	A3	cde	The extent to how specific strategic ends and means are
A	Review an revise frequency of strategic ends and means	A4		How often progress towards ends and means is reviewed and revised
A	Organizational levels participating in the formation of strategic ends and means	A5		Which organizational levels participate in the formation of strategic ends and means
A	Importance of strategic planning in guiding subordinate behavior	A5		Overall importance of strategic planning
B	Translation of Strategy into Short-term Action Plans	B1		How are strategic plans translated into short-term plans. is the process top-down or bottom-up?
B	Target-setting Process of Short-term Ends and Means	B2	a, b	Which organization levels determine the short-term targets
B	Update Frequency of Short-term Plans	B3	a, b, c	How often shor-term plans are updated
B	Importance of Short-term Planning in Guiding Subordinate Behavior	B5		Overall importance of short-term planning
C	Usage of Budgetary- and Extended Performance Measurement Systems	C2	abc, defgh	To what extent are budgetary- and performance measurement systems used interactively and diagnostically
C	OPEX and CAPEX Control Methods	C1	a, b	What kind of methods are used for OPEX and CAPEX control
C	Basis of Performance Evaluation	C3	a, b	To what extent is performance evaluation of subordinates based on financial- or non-financial measures
C	Frequency of Formalized Performance Evaluations	C6	a, b	How often business- and leadership performance is formally evaluated
C	Importance of Performance Measurement and Evaluation in Guiding Subordinate Behavior	C7		Overall importance of performance measurement and evaluation

Appendix 3. List of examined constructs. sections D-F

Section	Name	Construct in questionnaire	Items covered	Explanation
D	Performance Measures in Determining Financial Rewards	D1	a, b	What measures are used to determine subordinates' financial rewards
D	Nature of Rewarding	D3	d, e	The extent to which rewarding is financial and non-financial
D	Purposes of Financial- and Non-financial rewarding	D4	a, b, c	The importance of different purposes for financial- and non-financial rewarding
D	Possible Maximum Bonus as a % of Annual Salary	D5	a	How much is it possible for subordinates to receive as financial bonus (% of annual base salary)
D	Importance of Rewards and Compensation in Guiding Subordinate Behavior	D5	b	Overall importance of rewads and compensation
E	Broadness and Stability of Management Groups	E1	c, d, e, f	How broad and stable are management groups within and across SBU boundaries
E	Degree of Influence on Decisions	E3	abcdefghijklm	How much overall influence on business decisions does top management have versus that of subordinates
E	Usage of Formal Rules and Procedures	E4	abcdefgh	To what extent are formal rules and procedures used
E	Importance of Management Process. Organization Design and Rules and Procedures in Guiding Subodinate Behavior	E5	a, b, c	Overall importance of management process, organization design and rules and procedures
F	Promotion Culture	F1	a, b	To what extent are promotions made from within the organization & how important is job-rotation as a precondition for promotion
F	Socialization	F1	fgh	To what extent is socialization used as a control device
F	Formality of Mission- and Vision Statements	F2	a, e	How formal are mission and vision statements
F	Usage of Mission- and Vision Statements for Guiding Subordinate Actions	F2	d, h	To what extent are mission- and vision statements used for actual control purposes
F	Importance of Culture and Values in Guiding Subordinate Behavior	F3		Overall importance of culture and values

Appendix 4. Performance measurement options (D1)

1	Financial - Revenue (e.g. sales)
2	Financial - Profit (e.g. EBIT. profit margin. gross margin)
3	Financial - Cost (e.g. operating expeditures. capital expenditures)
4	Financial - ROI (e.g. ROA. ROS. ROCE)
5	Financial - Cash flow (e.g. free cash flow. working capital)
6	Customer / market (e.g. market share. market growth. customer satisfaction/retention)
7	Employee / team (e.g employee satisfaction. individual and team performance. workforce capabilities. 360 evaluation. individual development
8	Operational (e.g. productivity. safety. cycle time. health and safety compliance. inventory turnover. lead time)
9	Quality (e.g. defect rates. quality assesments)
10	Alliances / Supplier relations (e.g. on-time delivery. joint venture metrics)
11	Innovation (e.g. new product/service development. R&D spend)
12	Social and Environmental (e.g. public image. community ratings. environmenta compliance)
13	Individual objectives (e.g. fulfilment of specific projects)
14	Other

Appendix 5. Most Popular Performance Measure (D1)

Country	Financial	Non-financial
Australia	Financial-profit	Employee/team
Austria	Financial-profit	Individual objectives
Belgium	Financial-profit	Individual objectives
Denmark	Financial-profit	Individual objectives
Finland	Financial-profit	Customer/market
Germany	Financial-profit	Individual objectives
Italy	Financial-profit	Employee/team
Norway	Financial-profit	Operational
Poland	Financial-profit	Individual objectives
Sweden	Financial-profit	Operational
Total	Financial-profit	Individual objectives

Appendix 6. Mean scores for individual decisions (E3)

Decision	Mean score										
	Country name										
	Australia	Austria	Belgium	Denmark	Finland	Germany	Italy	Norway	Poland	Sweden	Total
a. Establishment of new businesses	2.000	1.651	2.265	1.708	1.844	1.647	1.966	1.582	2.408	3.010	2.033
b. Development of new products/ services	3.140	3.458	3.918	3.068	3.889	3.448	2.700	3.388	3.120	3.885	3.425
c. Extension/ enlargement investments	2.438	2.771	2.896	2.291	2.379	2.581	2.424	1.877	2.460	2.509	2.440
d. Replacement investments	2.979	4.563	4.265	3.543	3.506	3.667	3.525	3.508	3.900	3.661	3.673
e. Project/program financing	2.327	2.833	2.604	2.327	2.689	2.357	2.237	2.524	2.082	2.870	2.500
f. Product/ service pricing	3.780	3.813	4.191	3.805	4.649	3.081	3.017	3.657	3.714	4.113	3.815
g. Distribution channel choice	3.349	4.143	4.310	3.267	4.269	2.951	2.586	2.789	3.739	3.785	3.488
h. Choosing and contracting customers	4.360	5.191	5.340	4.452	4.989	4.367	3.982	3.687	3.958	4.323	4.450
i. Choosing and contracting suppliers	4.240	4.854	4.531	4.043	4.562	3.988	3.983	3.682	4.102	4.045	4.168
j. Prioritizing activities	4.020	3.941	4.000	4.000	4.781	3.581	2.967	3.941	2.780	3.966	3.872
k. Compensation policy and rewards within the BU	2.224	1.766	3.167	2.764	2.639	1.884	1.966	2.000	2.080	2.276	2.304
l. Hiring and firing employees within the BU	3.540	5.080	4.265	4.658	3.828	2.586	2.279	3.559	3.520	3.259	3.649
m. Work process arrangements within the BU	4.380	5.294	5.265	4.858	4.663	4.103	3.639	4.529	4.020	4.534	4.534

Appendix 7. Highest and lowest number of statistically significant pair-wise differences

Country	Highest	N:o	Lowest	N:o
Australia	Austria. Finland	13	Poland	2
Austria	Italy	20	Belgium	11
Belgium	Italy	16	Australia	4
Denmark	Italy	22	Australia	6
Finland	Italy	24	Poland	9
Germany	Denmark	21	Australia	8
Italy	Finland	24	Germany	9
Norway	Finland	22	Australia. Denmark	7
Poland	Austria. Italy	13	Australia	2
Sweden	Austria	19	Australia	7

Appendix 8. Number of statistically significant differences within small and large organizations per section

Section	Australia	Austria	Belgium	Canada	Denmark	Finland	Germany	Italy	Norway	Poland	Sweden
A	0	2	1	0	1	1	4	1	1	3	1
B	0	0	1	0	0	0	0	0	0	0	1
C	0	2	1	0	4	0	4	2	0	1	2
D	1	0	1	0	9	0	3	6	0	4	2
E	1	0	5	0	3	1	0	1	3	1	1
F	0	2	1	0	1	0	5	0	0	0	2
TOTAL	2	6	10	0	18	2	16	10	4	9	9

Appendix 9. Statistical significance tests for section A

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.78	9	736	0.00						6.48	9	256	0.00**
Qualitative strategic ends	1.50	9	742	0.15*	40.43	9	4.49	2.28	0.02**				
Quantitative strategic ends	2.48	9	741	0.01						2.93	9	259	0.00**
Strategic ends specificity	1.43	9	740	0.17*	105.66	9	11.74	7.89	0.00**				
Strategic means specificity	1.74	9	738	0.08*	100.04	9	11.12	6.07	0.00**				
Review frequency of strategic ends	2.57	9	740	0.01						5.30	9	260	0.00**
Revise frequency of strategic ends	0.18	9	729	1.00*	1189.38	9	132.15	2.41	0.01**				
Review frequency of strategic means	1.64	9	726	0.10*	503.15	9	55.91	1.78	0.07**				
Revise frequency of strategic means	2.53	9	720	0.01						3.49	9	261	0.00**
Formulation of strategic ends	6.93	9	738	0.00						2.91	9	261	0.00**
Formulation of strategic means	1.99	9	733	0.04						4.34	9	259	0.00**
Importance of Strategic planning	7.94	9	742	0.00						14.42	9	262	0.00**

* Equal variances. **Statistical significance at 0.05 level

Appendix 10. Statistical significance tests for section B

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	4.80	9	742	0.00						7.00	9	263	0.00**
Short-term target-setting process. ends	1.41	9	742	0.18*	10.52	9	1.17	1.50	0.14				
Short-term target-setting process. means	2.36	9	740	0.01						3.60	9	262	0.00**
Targeted performance in months	15.81	9	745	0.00						15.20	9	259	0.00**
Action plans in months	6.77	9	742	0.00						1.88	9	259	0.05**
Resource commitments in months	9.41	9	740	0.00						5.12	9	257	0.00**
Information about coordination	0.14	9	745	1.00*	19.23	9	2.14	1.99	0.04**				
Information about resource requirements	1.03	9	745	0.41*	11.88	9	1.32	1.15	0.33				
Importance of Short-term Planning	1.41	9	742	0.18*	36.82	9	4.09	3.39	0.00**				

* Equal variances. **Statistical significance at 0.05 level

Appendix 11. Statistical significance tests for section C

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	1.81	9	743	0.06*	46.93	9	5.21	2.25	0.02**				
Control of CAPEX	17.17	9	739	0.00						8.64	9	266	0.00**
Diagnostic usage of budgets	3.12	9	738	0.00						3.05	9	255	0.00**
Interactive usage of budgets	1.29	9	738	0.24*	89.19	9	9.91	5.29	0.00**				
Diagnostic usage of PMs	6.27	9	735	0.00						5.16	9	258	0.00**
Interactive usage of PMs	2.80	9	736	0.00						9.58	9	259	0.00**
PE-financial measures	6.69	9	744	0.00						8.56	9	259	0.00**
PE-non-financial measures	3.62	9	743	0.00						1.92	9	262	0.05**
Number of performance measures	5.10	9	708	0.00						6.94	9	250	0.00**
PE for leadership performance	2.64	9	705	0.01						4.48	9	243	0.00**
PE for business performance	2.33	9	722	0.01						19.35	9	250	0.00**
Importance of performance measurement and evaluation	1.17	9	742	0.31*	43.81	9	4.87	3.54	0.00**				

* Equal variances. **Statistical significance at 0.05 level

Appendix 12. Statistical significance tests for section D

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	4.03	9	745	0.00						7.94	9	261	0.00**
Number of non-financial measures	5.82	9	745	0.00						9.47	9	265	0.00**
Number of total measures	9.32	9	745	0.00						23.61	9	261	0.00**
Usage of f & n-f measures	22.25	9	647	0.00						8.16	9	223	0.00**
Weight of financial measures	6.98	9	601	0.00						1.81	9	215	0.07
Weight of non-financial measures	6.98	9	601	0.00						1.81	9	215	0.07
Extent of financial rewarding	11.94	9	739	0.00						10.69	9	262	0.00**
Extent of non-financial rewarding	3.81	9	738	0.00						8.19	9	260	0.00**
Financial rewards committing	11.68	9	737	0.00						9.72	9	261	0.00**
Financial rewards motivating	9.47	9	737	0.00						3.90	9	262	0.00**
Financian rewards directing attention	6.67	9	738	0.00						6.86	9	261	0.00**
Non-financial rewards committing	4.35	9	731	0.00						15.34	9	256	0.00**
Non-financial rewards motivating	14.90	9	731	0.00						6.71	9	255	0.00**
Non-financial rewads directing attention	8.74	9	731	0.00						3.61	9	257	0.00**
Average% of max. possibe bonus	8.39	9	730	0.00						4.47	9	252	0.00**
Importance of rewards and compensation	6.14	9	738	0.00						4.30	9	262	0.00**

* Equal variances. **Statistical significance at 0.05 level

Appendix 13. Statistical significance tests for section E

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	1.00	9	743	0.43*	64.21	9	7.13	3.65	0.00**				
Frequency of management groups conveying in weeks	3.18	9	736	0.00						4.34	9	260	0.00**
Influence on decisions	1.24	9	484	0.27*	51.54	9	5.73	8.62	0.00**				
Influence on expanding business	1.67	9	633	0.09*	58.49	9	6.50	7.06	0.00**				
Influence on personnel-related matters	3.36	9	690	0.00						16.52	9	251	0.00**
Formality of rules and procedures	2.00	9	621	0.04						5.33	9	226	0.00**
Stability of management groups	3.20	9	738	0.00						58.18	9	255	0.00**
Broadness of management groups	7.67	9	737	0.00						8.18	9	257	0.00**
Importance of Management Processes	3.80	9	744	0.00						7.02	9	265	0.00**
Importance of Organization Design	3.96	9	744	0.00						6.13	9	262	0.00**
Importance of Rules and Procedures	1.16	9	744	0.32*	87.92	9	9.77	5.52	0.00**				

* Equal variances. **Statistical significance at 0.05 level

Appendix 14. Statistical significance tests for section F

Construct	Test of Homogeneity of Variances				ANOVA					Robust Tests of Equality of Means			
	Levene Statistic	df1	df2	Sig.	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	1.23	9	743	0.27*	27.49	9	3.05	2.07	0.03**				
Job rotation	1.47	9	743	0.16*	189.57	9	21.06	9.02	0.00**				
Socialization	3.66	9	741	0.00						4.34	9	261	0.00**
Formality of mission statement	4.55	9	743	0.00						10.93	9	260	0.00**
Mission for guiding purposes	3.99	9	743	0.00						5.26	9	263	0.00**
Formality of vision statement	3.78	9	743	0.00						10.57	9	262	0.00**
Vision for guiding purposes	2.97	9	743	0.00						11.02	9	264	0.00**
Importance of Culture and Values	3.95	9	742	0.00						4.60	9	262	0.00**

* Equal variances. **Statistical significance at 0.05 level

Appendix 15. Scores for small and large organizations in Australia. Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.762	1.358	42	5.125	2.642	8						2.03	1	8	0.19
Qualitative strategic ends	5.071	1.644	42	5.375	1.598	8	0.62	1	0.62	0.23	0.63				
Quantitative strategic ends	5.095	1.284	42	5.250	1.488	8	0.16	1	0.16	0.09	0.76				
Strategic ends specificity	4.984	1.349	42	4.833	1.234	8	0.15	1	0.15	0.09	0.77				
Strategic means specificity	4.405	1.419	42	4.208	0.925	8	0.26	1	0.26	0.14	0.71				
Review frequency of strategic ends	5.690	6.460	42	5.500	4.440	8	0.24	1	0.24	0.01	0.94				
Revise frequency of strategic ends	9.381	6.293	42	8.625	4.749	8	3.84	1	3.84	0.1	0.75				
Review frequency of strategic means	5.619	4.580	42	5.375	4.406	8	0.4	1	0.4	0.02	0.89				
Revise frequency of strategic means	8.667	4.837	42	6.750	4.559	8	24.69	1	24.69	1.07	0.31				
Formulation of strategic ends	2.286	1.235	42	2.750	1.035	8	1.45	1	1.45	0.99	0.32				
Formulation of strategic means	2.524	1.215	42	3.375	1.188	8	4.87	1	4.87	3.32	0.07				
Importance of Strategic planning	4.786	1.842	42	4.750	1.389	8	0.01	1	0.01	0	0.96				

Appendix 16. Scores for small and large organizations in Australia, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.524	1.194	42	2.500	1.604	8	0	1	0	0	0.96				
Short-term target-setting process. ends	2.071	0.867	42	2.375	1.061	8	0.62	1	0.62	0.77	0.38				
Short-term target-setting process. means	2.333	1.028	42	2.750	0.886	8	1.17	1	1.17	1.15	0.29				
Targeted performance in months	4.589	4.276	42	2.813	3.870	8	21.21	1	21.21	1.19	0.28				
Action plans in months	3.089	3.351	42	1.531	1.022	8	16.31	1	16.31	1.67	0.2				
Resource commitments in months	2.833	3.409	42	1.188	0.914	8						7.11	1	42	0.01**
Information about coordination	5.183	0.974	42	4.500	1.155	8	3.13	1	3.13	3.11	0.08				
Information about resource requirements	5.119	1.082	42	4.375	1.343	8	3.72	1	3.72	2.94	0.09				
Importance of Short-term Planning	5.714	0.805	42	4.875	1.642	8						2	1	8	0.2

Appendix 17. Scores for small and large organizations in Australia, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	3.381	1.637	42	3.750	1.909	8	0.92	1	0.92	0.32	0.57				
Control of CAPEX	3.905	1.910	42	3.250	1.581	8						1.07	1	11	0.32
Diagnostic usage of budgets	5.437	1.366	42	4.583	2.362	8						0.98	1	8	0.35
Interactive usage of budgets	4.914	1.435	42	3.875	2.048	8	7.26	1	7.26	3.06	0.09				
Diagnostic usage of PMs	5.175	1.520	42	5.833	0.926	8	2.92	1	2.92	1.39	0.24				
Interactive usage of PMs	4.929	1.476	42	4.725	1.166	8	0.28	1	0.28	0.14	0.71				
PE-financial measures	5.857	1.221	42	5.375	1.685	8	1.56	1	1.56	0.93	0.34				
PE-non-financial measures	5.286	1.088	42	5.125	2.100	8						0.04	1	8	0.84
Number of performance measures	6.262	3.231	42	5.375	2.669	8	5.29	1	5.29	0.53	0.47				
PE for leadership performance	8.026	4.233	39	8.375	3.998	8	0.81	1	0.81	0.05	0.83				
PE for business performance	5.700	4.937	40	3.625	4.069	8	28.7	1	28.7	1.24	0.27				
Importance of performance measurement and evaluation	5.548	1.173	42	4.750	1.282	8	4.28	1	4.28	3.02	0.09				

Appendix 18. Scores for small and large organizations in Australia, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.619	0.987	42	1.750	0.886	8	0.12	1	0.12	0.12	0.73				
Number of non-financial measures	1.786	1.071	42	1.750	0.463	8						0.02	1	24	0.88
Number of total measures	3.405	1.149	42	3.500	0.926	8	0.06	1	0.06	0.05	0.83				
Usage of f & n-f measures	1.262	0.587	42	1.000	0.000	8						0	0	0	0.00**
Weight of financial measures	0.591	0.289	42	0.581	0.198	8	0	1	0	0.01	0.93				
Weight of non-financial measures	0.409	0.289	42	0.419	0.198	8	0	1	0	0.01	0.93				
Extent of financial rewarding	5.190	1.612	42	5.625	2.066	8	1.27	1	1.27	0.45	0.51				
Extent of non-financial rewarding	4.429	1.252	42	4.000	1.773	8	1.23	1	1.23	0.69	0.41				
Financial rewards committing	5.143	1.299	42	4.875	1.808	8	0.48	1	0.48	0.25	0.62				
Financial rewards motivating	5.048	1.306	42	4.500	1.690	8	2.02	1	2.02	1.08	0.3				
Financian rewards directing attention	4.810	1.469	42	4.375	2.134	8	1.27	1	1.27	0.51	0.48				
Non-financial rewards committing	5.143	1.336	42	4.125	2.100	8	6.96	1	6.96	3.21	0.08				
Non-financial rewards motivating	5.143	1.201	42	4.125	2.100	8						1.77	1	8	0.22
Non-financial rewads directing attention	4.714	1.402	42	3.875	2.232	8						1.05	1	8	0.33
Average% of max. possibe bonus	24.536	23.691	42	44.375	30.052	8	2644.97	1	2644.97	4.33	0.04**				
Importance of rewards and compensation	4.905	1.527	42	4.500	1.773	8	1.1	1	1.1	0.45	0.51				

Appendix 19. Scores for small and large organizations in Australia, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.583	1.538	42	4.500	1.389	8	5.65	1	5.65	2.45	0.12				
Frequency of management groups conveying in weeks	2.167	1.305	42	1.875	1.356	8	0.57	1	0.57	0.33	0.57				
Influence on decisions	3.337	0.776	32	3.626	0.473	7	0.48	1	0.48	0.89	0.35				
Influence on expanding business	2.504	0.898	39	2.958	0.653	8	1.37	1	1.37	1.83	0.18				
Influence on personnel-related matters	3.301	1.278	41	3.625	0.805	8	0.7	1	0.7	0.47	0.49				
Formality of rules and procedures	2.897	0.777	39	2.750	0.868	8	0.14	1	0.14	0.23	0.63				
Stability of management groups	5.619	1.248	42	5.750	1.282	8	0.12	1	0.12	0.07	0.79				
Broadness of management groups	4.524	1.756	42	4.625	1.302	8	0.07	1	0.07	0.02	0.88				
Importance of Management Processes	5.595	0.964	42	5.250	1.035	8	0.8	1	0.8	0.84	0.36				
Importance of Organization Design	5.310	1.115	42	5.125	0.991	8	0.23	1	0.23	0.19	0.66				
Importance of Rules and Procedures	5.190	1.254	42	4.500	1.512	8	3.2	1	3.2	1.91	0.17				

Appendix 20. Scores for small and large organizations in Australia, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.619	1.011	42	5.625	0.744	8	0	1	0	0	0.99				
Job rotation	3.857	1.601	42	4.000	1.690	8	0.14	1	0.14	0.05	0.82				
Socialization	4.881	1.187	42	4.000	0.797	8	5.22	1	5.22	4.03	0.05				
Formality of mission statement	5.286	1.891	42	5.250	1.488	8	0.01	1	0.01	0	0.96				
Mission for guiding purposes	4.333	1.790	42	4.375	1.768	8	0.01	1	0.01	0	0.95				
Formality of vision statement	5.095	1.973	42	4.375	1.598	8	3.49	1	3.49	0.94	0.34				
Vision for guiding purposes	3.786	1.881	42	3.250	1.753	8	1.93	1	1.93	0.56	0.46				
Importance of Culture and Values	5.976	0.975	42	5.875	0.835	8	0.07	1	0.07	0.08	0.78				

Appendix 21. Scores for small and large organizations in Austria, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	5.030	1.811	33	4.143	1.748	14	7.74	1	7.74	2.41	0.13				
Qualitative strategic ends	5.200	1.844	35	5.083	1.505	12	0.12	1	0.12	0.04	0.84				
Quantitative strategic ends	5.314	2.026	35	6.583	0.996	12						8.05	1	39	0.01**
Strategic ends specificity	5.600	1.623	35	6.424	0.732	11	5.69	1	5.69	2.64	0.11				
Strategic means specificity	5.086	1.683	35	5.364	0.722	11						0.6	1	39	0.44
Review frequency of strategic ends	10.265	5.833	34	10.714	5.225	14	2	1	2	0.06	0.8				
Revise frequency of strategic ends	11.882	8.413	34	12.857	8.104	14	9.42	1	9.42	0.14	0.71				
Review frequency of strategic means	7.735	3.784	34	5.286	3.970	14	59.5	1	59.5	4.04	0.05**				
Revise frequency of strategic means	7.412	3.661	34	5.643	3.775	14	31.03	1	31.03	2.27	0.14				
Formulation of strategic ends	2.471	0.961	34	2.357	1.151	14	0.13	1	0.13	0.12	0.73				
Formulation of strategic means	2.765	0.987	34	3.000	0.784	14	0.55	1	0.55	0.63	0.43				
Importance of Strategic planning	5.000	1.836	36	5.000	1.569	14	0	1	0	0	1				

Appendix 22. Scores for small and large organizations in Austria, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.556	0.998	36	2.214	0.579	14						2.26	1	40	0.14
Short-term target-setting process. ends	2.111	0.887	36	1.857	0.770	14	0.65	1	0.65	0.88	0.35				
Short-term target-setting process. means	3.083	1.052	36	3.000	1.109	14	0.07	1	0.07	0.06	0.81				
Targeted performance in months	7.833	4.475	36	8.286	4.665	14	2.06	1	2.06	0.1	0.75				
Action plans in months	3.625	3.468	36	3.000	2.961	14	3.94	1	3.94	0.35	0.56				
Resource commitments in months	4.181	3.989	36	3.286	3.811	14	8.07	1	8.07	0.52	0.47				
Information about coordination	5.546	1.002	36	5.500	0.967	14	0.02	1	0.02	0.02	0.88				
Information about resource requirements	4.826	1.177	36	5.399	0.854	14	3.3	1	3.3	2.74	0.1				
Importance of Short-term Planning	6.250	0.937	36	6.071	1.207	14	0.32	1	0.32	0.31	0.58				

Appendix 23. Scores for small and large organizations in Austria, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	2.528	1.276	36	2.857	1.657	14	1.09	1	1.09	0.57	0.46				
Control of CAPEX	2.194	1.117	36	1.643	0.497	14	3.07	1	3.07	3.14	0.08				
Diagnostic usage of budgets	5.314	1.597	34	5.778	1.095	12	1.91	1	1.91	0.86	0.36				
Interactive usage of budgets	5.171	1.359	34	5.518	0.997	12	1.07	1	1.07	0.66	0.42				
Diagnostic usage of PMs	5.569	1.481	34	6.182	0.736	11	3.13	1	3.13	1.73	0.2				
Interactive usage of PMs	5.294	1.489	34	6.192	0.653	12						8	1	42	0.01**
PE-financial measures	5.667	1.957	36	6.571	0.756	14						5.56	1	48	0.02**
PE-non-financial measures	5.583	1.519	36	4.786	1.718	14	6.41	1	6.41	2.58	0.11				
Number of performance measures	5.900	2.141	35	5.231	3.539	13	4.25	1	4.25	0.64	0.43				
PE for leadership performance	10.265	3.934	34	11.786	4.475	14	22.94	1	22.94	1.37	0.25				
PE for business performance	10.265	3.934	34	11.786	4.475	14	22.94	1	22.94	1.37	0.25				
Importance of performance measurement and evaluation	6.056	1.094	36	5.857	1.231	14	0.4	1	0.4	0.31	0.58				

Appendix 24. Scores for small and large organizations in Austria, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.722	1.085	36	2.143	1.512	14	1.78	1	1.78	1.21	0.28				
Number of non-financial measures	1.444	0.998	36	1.071	0.997	14	1.4	1	1.4	1.41	0.24				
Number of total measures	3.167	1.424	36	3.214	1.888	14	0.02	1	0.02	0.01	0.92				
Usage of f & n-f measures	1.206	0.538	34	1.083	0.289	12	0.13	1	0.13	0.56	0.46				
Weight of financial measures	0.589	0.253	26	0.600	0.252	12	0	1	0	0.02	0.9				
Weight of non-financial measures	0.411	0.253	26	0.400	0.252	12	0	1	0	0.02	0.9				
Extent of financial rewarding	5.618	1.724	34	5.923	1.256	13	0.88	1	0.88	0.34	0.56				
Extent of non-financial rewarding	4.206	1.903	34	4.231	2.204	13	0.01	1	0.01	0	0.97				
Financial rewards committing	5.059	1.434	34	5.923	1.038	13	7.02	1	7.02	3.91	0.05				
Financial rewards motivating	4.735	1.355	34	4.615	1.121	13	0.14	1	0.14	0.08	0.78				
Financian rewards directing attention	5.206	1.366	34	5.714	1.773	14	2.56	1	2.56	1.15	0.29				
Non-financial rewards committing	5.029	1.883	34	4.500	2.111	12	2.49	1	2.49	0.66	0.42				
Non-financial rewards motivating	5.353	1.998	34	5.250	2.301	12	0.09	1	0.09	0.02	0.88				
Non-financial rewads directing attention	4.412	2.190	34	4.000	2.296	12	1.5	1	1.5	0.31	0.58				
Average% of max. possibe bonus	23.114	13.900	35	27.929	12.688	14	231.77	1	231.77	1.26	0.27				
Importance of rewards and compensation	5.500	1.331	34	5.143	1.167	14	1.26	1	1.26	0.76	0.39				

Appendix 25. Scores for small and large organizations in Austria, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	2.528	1.075	36	3.321	1.367	14	6.35	1	6.35	4.7	0.04**				
Frequency of management groups conveying in weeks	3.257	2.694	35	4.917	4.441	12						1.49	1	14	0.24
Influence on decisions	3.804	0.740	24	3.880	0.801	9						0.06	1	13	0.81
Influence on expanding business	2.756	0.871	30	2.389	0.897	12	1.15	1	1.15	1.49	0.23				
Influence on personnel-related matters	4.172	0.821	33	3.821	0.777	13	1.15	1	1.15	1.76	0.19				
Formality of rules and procedures	3.144	1.035	30	3.182	1.311	11	0.01	1	0.01	0.01	0.92				
Stability of management groups	6.543	1.094	35	6.667	0.651	12	0.14	1	0.14	0.14	0.71				
Broadness of management groups	3.086	1.788	35	3.167	1.801	12	0.06	1	0.06	0.02	0.89				
Importance of Management Processes	6.222	1.098	36	6.500	0.650	14	0.78	1	0.78	0.78	0.38				
Importance of Organization Design	4.528	1.404	36	4.000	1.664	14	2.81	1	2.81	1.28	0.26				
Importance of Rules and Procedures	5.056	1.492	36	5.143	1.351	14	0.08	1	0.08	0.04	0.85				

Appendix 26. Scores for small and large organizations in Austria, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.417	1.402	36	5.357	1.151	14	0.04	1	0.04	0.02	0.89				
Job rotation	3.111	1.817	36	3.714	2.091	14	3.67	1	3.67	1.02	0.32				
Socialization	4.611	1.390	36	4.405	1.360	14	0.43	1	0.43	0.22	0.64				
Formality of mission statement	5.833	1.964	36	6.857	0.363	14						8.99	1	41	0.00**
Mission for guiding purposes	4.750	2.260	36	5.214	1.369	14						0.78	1	39	0.38
Formality of vision statement	6.222	1.436	36	6.643	0.745	14	1.78	1	1.78	1.08	0.3				
Vision for guiding purposes	5.306	1.925	36	6.286	0.914	14						5.91	1	46	0.02**
Importance of Culture and Values	6.028	1.341	36	6.429	0.646	14	1.62	1	1.62	1.14	0.29				

Appendix 27. Scores for small and large organizations in Belgium, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	4.628	1.291	43	5.143	1.345	7	1.6	1	1.6	0.95	0.34				
Qualitative strategic ends	5.395	1.178	43	6.286	0.488	7						11.96	1	20	0.00**
Quantitative strategic ends	4.907	1.428	43	5.571	1.618	7	2.66	1	2.66	1.26	0.27				
Strategic ends specificity	4.674	1.205	43	4.476	1.086	7	0.24	1	0.24	0.17	0.68				
Strategic means specificity	4.225	1.114	43	4.095	1.117	7	0.1	1	0.1	0.08	0.78				
Review frequency of strategic ends	6.744	5.811	43	6.571	4.158	7	0.18	1	0.18	0.01	0.94				
Revise frequency of strategic ends	12.837	7.550	43	10.286	2.928	7	39.19	1	39.19	0.77	0.38				
Review frequency of strategic means	6.395	5.577	43	5.000	3.830	7	11.72	1	11.72	0.4	0.53				
Revise frequency of strategic means	11.279	8.333	43	7.429	4.614	7	89.25	1	89.25	1.41	0.24				
Formulation of strategic ends	2.233	0.841	43	2.286	0.951	7	0.02	1	0.02	0.02	0.88				
Formulation of strategic means	2.651	0.948	43	2.429	0.787	7	0.3	1	0.3	0.35	0.56				
Importance of Strategic planning	5.860	0.915	43	6.143	0.690	7	0.48	1	0.48	0.61	0.44				

Appendix 28. Scores for small and large organizations in Belgium, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.512	0.856	43	3.429	1.134	7	5.06	1	5.06	6.32	0.02**				
Short-term target-setting process. ends	2.209	0.940	43	2.429	0.976	7	0.29	1	0.29	0.32	0.57				
Short-term target-setting process. means	2.465	0.909	43	3.000	1.000	7	1.72	1	1.72	2.03	0.16				
Targeted performance in months	5.122	4.152	43	3.143	2.268	7	23.58	1	23.58	1.5	0.23				
Action plans in months	3.640	3.411	43	2.214	2.191	7	12.23	1	12.23	1.13	0.29				
Resource commitments in months	3.262	3.302	43	2.321	2.095	7	5.32	1	5.32	0.53	0.47				
Information about coordination	4.868	1.039	43	5.476	0.766	7	2.23	1	2.23	2.18	0.15				
Information about resource requirements	5.006	0.949	43	5.393	1.189	7	0.9	1	0.9	0.94	0.34				
Importance of Short-term Planning	5.651	1.131	43	5.857	1.464	7	0.26	1	0.26	0.18	0.67				

Appendix 29. Scores for small and large organizations in Belgium, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	3.116	1.562	43	2.000	0.816	7						8.2	1	15	0.01**
Control of CAPEX	2.419	1.516	43	1.857	0.690	7	1.9	1	1.9	0.92	0.34				
Diagnostic usage of budgets	5.132	1.134	43	5.381	1.957	7	0.37	1	0.37	0.23	0.63				
Interactive usage of budgets	4.763	1.174	43	4.171	1.547	7	2.11	1	2.11	1.4	0.24				
Diagnostic usage of PMs	4.612	1.617	43	5.000	1.944	7	0.9	1	0.9	0.33	0.57				
Interactive usage of PMs	4.349	1.528	43	4.000	1.465	7	0.73	1	0.73	0.32	0.58				
PE-financial measures	5.512	1.261	43	6.143	1.069	7	2.4	1	2.4	1.56	0.22				
PE-non-financial measures	5.116	1.096	43	5.429	0.787	7	0.59	1	0.59	0.52	0.47				
Number of performance measures	6.163	3.976	43	7.714	4.309	7	14.49	1	14.49	0.9	0.35				
PE for leadership performance	10.048	4.726	42	5.857	3.288	7	105.36	1	105.36	5.05	0.03				
PE for business performance	4.905	4.411	42	5.857	3.288	7						0.45	1	10	0.52
Importance of performance measurement and evaluation	5.767	0.972	43	6.000	1.155	7	0.33	1	0.33	0.33	0.57				

Appendix 30. Scores for small and large organizations in Belgium, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.512	1.203	43	2.429	2.070	7	5.06	1	5.06	2.81	0.1				
Number of non-financial measures	0.953	1.022	43	1.143	1.069	7	0.22	1	0.22	0.2	0.65				
Number of total measures	2.465	1.856	43	3.571	2.440	7	7.37	1	7.37	1.96	0.17				
Usage of f & n-f measures	1.273	0.517	33	1.500	0.837	6	0.26	1	0.26	0.81	0.38				
Weight of financial measures	0.692	0.235	33	0.608	0.348	6	0.04	1	0.04	0.55	0.46				
Weight of non-financial measures	0.308	0.235	33	0.392	0.348	6	0.04	1	0.04	0.55	0.46				
Extent of financial rewarding	5.535	1.222	43	6.143	1.464	7	2.23	1	2.23	1.41	0.24				
Extent of non-financial rewarding	4.209	1.597	43	4.143	1.676	7	0.03	1	0.03	0.01	0.92				
Financial rewards committing	5.000	1.558	43	5.429	1.813	7	1.11	1	1.11	0.44	0.51				
Financial rewards motivating	4.860	1.656	43	5.286	1.976	7	1.09	1	1.09	0.38	0.54				
Financian rewards directing attention	4.977	1.318	43	4.857	1.676	7	0.09	1	0.09	0.05	0.83				
Non-financial rewards committing	5.209	1.597	43	6.143	0.690	7	5.25	1	5.25	2.29	0.14				
Non-financial rewards motivating	5.372	1.496	43	6.143	0.690	7						4.95	1	17	0.04**
Non-financial rewads directing attention	4.953	1.511	43	5.286	1.113	7	0.66	1	0.66	0.31	0.58				
Average% of max. possibe bonus	19.605	14.296	43	22.143	10.746	7	38.78	1	38.78	0.2	0.66				
Importance of rewards and compensation	4.605	1.312	43	4.857	1.345	7	0.38	1	0.38	0.22	0.64				

Appendix 31. Scores for small and large organizations in Belgium, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.372	1.419	43	3.786	1.318	7	1.03	1	1.03	0.52	0.47				
Frequency of management groups conveying in weeks	3.140	2.624	43	2.286	1.254	7	4.39	1	4.39	0.71	0.41				
Influence on decisions	3.806	0.858	36	4.603	0.842	6						4.58	1	7	0.07
Influence on expanding business	2.921	1.205	42	3.778	1.047	6	3.86	1	3.86	2.73	0.11				
Influence on personnel-related matters	4.119	1.268	42	4.889	1.328	6	3.11	1	3.11	1.91	0.17				
Formality of rules and procedures	3.098	1.109	41	4.111	1.109	6	5.38	1	5.38	4.37	0.04**				
Stability of management groups	5.953	0.999	43	6.429	0.535	7	1.36	1	1.36	1.5	0.23				
Broadness of management groups	4.093	1.586	43	5.571	1.397	7	13.16	1	13.16	5.38	0.02**				
Importance of Management Processes	5.535	1.032	43	6.143	0.690	7	2.23	1	2.23	2.25	0.14				
Importance of Organization Design	5.233	1.065	43	5.714	0.951	7	1.4	1	1.4	1.26	0.27				
Importance of Rules and Procedures	4.209	1.166	43	5.000	1.414	7	3.76	1	3.76	2.61	0.11				

Appendix 32. Scores for small and large organizations in Belgium, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.209	1.206	43	5.429	1.272	7	0.29	1	0.29	0.2	0.66				
Job rotation	4.000	1.496	43	5.429	1.272	7	12.29	1	12.29	5.69	0.02**				
Socialization	4.752	0.861	43	4.714	0.705	7	0.01	1	0.01	0.01	0.91				
Formality of mission statement	4.860	2.111	43	5.429	1.512	7	1.94	1	1.94	0.46	0.5				
Mission for guiding purposes	5.163	1.290	43	5.429	1.134	7	0.43	1	0.43	0.26	0.61				
Formality of vision statement	5.395	1.482	43	6.286	0.756	7	4.77	1	4.77	2.39	0.13				
Vision for guiding purposes	5.512	0.883	43	5.571	1.397	7						0.01	1	7	0.92
Importance of Culture and Values	6.070	0.961	43	6.000	1.155	7	0.03	1	0.03	0.03	0.86				

Appendix 33. Scores for small and large organizations in Denmark, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.567	1.190	90	4.241	1.455	29	9.98	1	9.98	6.3	0.01**				
Qualitative strategic ends	5.220	1.332	91	5.103	1.543	29	0.3	1	0.3	0.16	0.69				
Quantitative strategic ends	5.220	1.526	91	5.448	1.526	29	1.15	1	1.15	0.49	0.48				
Strategic ends specificity	4.835	1.300	91	5.092	1.151	29	1.45	1	1.45	0.9	0.34				
Strategic means specificity	4.451	1.389	91	4.471	1.156	29	0.01	1	0.01	0.01	0.94				
Review frequency of strategic ends	7.433	6.689	90	4.966	4.338	29	133.57	1	133.57	3.47	0.07				
Revise frequency of strategic ends	13.722	8.415	90	10.793	5.966	29	188.18	1	188.18	3.02	0.09				
Review frequency of strategic means	7.291	6.033	86	5.103	4.577	29	103.75	1	103.75	3.19	0.08				
Revise frequency of strategic means	11.767	8.027	86	9.207	6.832	29	142.19	1	142.19	2.37	0.13				
Formulation of strategic ends	2.311	1.024	90	2.103	0.939	29	0.95	1	0.95	0.94	0.33				
Formulation of strategic means	2.483	0.990	89	2.414	1.053	29	0.11	1	0.11	0.1	0.75				
Importance of Strategic planning	5.363	1.502	91	5.759	1.596	29	3.45	1	3.45	1.48	0.23				

Appendix 34. Scores for small and large organizations in Denmark, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.385	1.123	91	2.103	0.673	29						2.68	1	80	0.11
Short-term target-setting process. ends	2.022	0.919	91	2.276	0.702	29	1.42	1	1.42	1.86	0.17				
Short-term target-setting process. means	2.433	0.960	90	2.586	0.867	29	0.51	1	0.51	0.58	0.45				
Targeted performance in months	6.841	4.704	91	5.586	4.272	29						1.8	1	51	0.19
Action plans in months	3.439	3.264	90	3.741	3.296	29	2.01	1	2.01	0.19	0.67				
Resource commitments in months	2.147	2.105	90	2.103	2.429	29	0.04	1	0.04	0.01	0.93				
Information about coordination	5.073	1.074	91	5.471	0.875	29	3.48	1	3.48	3.28	0.07				
Information about resource requirements	4.709	1.034	91	5.000	0.980	29	1.86	1	1.86	1.79	0.18				
Importance of Short-term Planning	5.802	1.056	91	6.069	0.799	29						2.08	1	62	0.15

Appendix 35. Scores for small and large organizations in Denmark, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	3.088	1.510	91	2.724	1.709	29	2.91	1	2.91	1.2	0.28				
Control of CAPEX	3.705	2.085	88	2.517	1.825	29						8.58	1	54	0.00**
Diagnostic usage of budgets	5.451	1.493	91	5.989	0.871	29						5.72	1	83	0.02**
Interactive usage of budgets	4.393	1.473	91	5.179	0.908	29						11.82	1	78	0.00**
Diagnostic usage of PMs	5.410	1.481	91	5.575	1.480	29	0.59	1	0.59	0.27	0.6				
Interactive usage of PMs	4.367	1.407	91	4.745	1.537	29	3.14	1	3.14	1.52	0.22				
PE-financial measures	5.758	1.277	91	6.310	0.850	29	6.7	1	6.7	4.74	0.03				
PE-non-financial measures	5.077	1.258	91	5.345	1.143	29	1.58	1	1.58	1.04	0.31				
Number of performance measures	6.396	4.447	91	7.690	5.135	29	36.83	1	36.83	1.73	0.19				
PE for leadership performance	9.764	4.719	89	8.345	3.838	29	44.06	1	44.06	2.15	0.14				
PE for business performance	4.615	4.553	91	3.414	3.766	29						2.01	1	56	0.16
Importance of performance measurement and evaluation	5.582	1.230	91	5.759	1.023	29	0.68	1	0.68	0.49	0.49				

Appendix 36. Scores for small and large organizations in Denmark, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.440	1.400	91	2.379	1.399	29	19.42	1	19.42	9.91	0.00**				
Number of non-financial measures	0.945	1.242	91	1.483	1.503	29	6.36	1	6.36	3.71	0.06				
Number of total measures	2.385	2.043	91	3.862	2.117	29	48	1	48	11.31	0.00**				
Usage of f & n-f measures	1.379	0.519	66	1.185	0.396	27						3.79	1	63	0.06
Weight of financial measures	0.724	0.266	61	0.631	0.251	26	0.16	1	0.16	2.31	0.13				
Weight of non-financial measures	0.277	0.266	61	0.370	0.251	26	0.16	1	0.16	2.3	0.13				
Extent of financial rewarding	5.220	2.564	91	6.310	1.538	29						7.73	1	80	0.01**
Extent of non-financial rewarding	2.956	1.843	91	3.172	2.037	29	1.03	1	1.03	0.29	0.59				
Financial rewards committing	3.154	2.150	91	4.828	1.872	29	61.61	1	61.61	14.14	0.00**				
Financial rewards motivating	4.582	2.357	91	5.448	1.660	29						4.8	1	67	0.03**
Financian rewards directing attention	4.319	2.221	91	5.552	1.454	29						11.97	1	73	0.00**
Non-financial rewards committing	2.571	1.845	91	3.793	2.144	29	32.82	1	32.82	8.9	0.00**				
Non-financial rewards motivating	3.945	2.387	91	4.379	2.397	29	4.15	1	4.15	0.73	0.4				
Non-financial rewads directing attention	3.363	2.188	91	4.103	2.242	29	12.07	1	12.07	2.49	0.12				
Average% of max. possibe bonus	16.847	15.839	91	27.448	15.898	29	2471.56	1	2471.56	9.83	0.00**				
Importance of rewards and compensation	4.209	2.090	91	5.069	1.646	29						5.23	1	59	0.03**

Appendix 37. Scores for small and large organizations in Denmark, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.549	1.464	91	3.741	1.373	29	0.81	1	0.81	0.39	0.53				
Frequency of management groups conveying in weeks	4.148	4.497	88	3.276	2.951	29	16.58	1	16.58	0.95	0.33				
Influence on decisions	3.361	0.819	42	3.593	0.732	24	0.82	1	0.82	1.32	0.25				
Influence on expanding business	2.372	0.991	86	2.276	0.667	29	0.2	1	0.2	0.24	0.63				
Influence on personnel-related matters	4.077	1.151	82	4.095	1.165	28						0.01	1	46	0.94
Formality of rules and procedures	2.741	0.918	72	2.810	1.109	28	0.1	1	0.1	0.1	0.75				
Stability of management groups	6.189	0.898	90	5.862	1.026	29	2.34	1	2.34	2.71	0.1				
Broadness of management groups	3.843	1.971	89	4.000	1.871	29	0.54	1	0.54	0.14	0.71				
Importance of Management Processes	4.978	1.453	91	5.724	0.797	29						12.34	1	88	0.00**
Importance of Organization Design	5.066	1.218	91	5.103	1.235	29	0.03	1	0.03	0.02	0.89				
Importance of Rules and Procedures	4.912	1.443	91	4.931	1.602	29	0.01	1	0.01	0	0.95				

Appendix 38. Scores for small and large organizations in Denmark, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.121	1.237	91	5.172	1.167	29	0.06	1	0.06	0.04	0.84				
Job rotation	3.714	1.530	91	4.379	1.374	29	9.73	1	9.73	4.36	0.04				
Socialization	4.590	1.109	91	4.655	1.014	29	0.09	1	0.09	0.08	0.78				
Formality of mission statement	5.462	1.734	91	5.655	1.518	29	0.82	1	0.82	0.29	0.59				
Mission for guiding purposes	4.560	1.661	91	5.103	1.372	29	6.48	1	6.48	2.54	0.11				
Formality of vision statement	5.363	1.637	91	5.448	1.404	29	0.16	1	0.16	0.06	0.8				
Vision for guiding purposes	4.330	1.592	91	4.793	1.634	29	4.72	1	4.72	1.84	0.18				
Importance of Culture and Values	5.593	1.220	91	6.103	0.817	29						6.61	1	71	0.01**

Appendix 39. Scores for small and large organizations in Finland, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.720	1.290	75	4.053	1.471	19	1.68	1	1.68	0.95	0.33				
Qualitative strategic ends	5.453	1.298	75	5.895	0.994	19						2.62	1	35	0.11
Quantitative strategic ends	5.867	1.223	75	5.526	1.172	19	1.76	1	1.76	1.19	0.28				
Strategic ends specificity	5.462	1.027	75	5.175	1.183	19	1.25	1	1.25	1.11	0.29				
Strategic means specificity	4.951	1.154	75	4.719	1.433	19	0.81	1	0.81	0.55	0.46				
Review frequency of strategic ends	5.387	4.986	75	5.684	3.591	19	1.34	1	1.34	0.06	0.81				
Revise frequency of strategic ends	11.827	7.466	75	13.737	10.503	19	55.31	1	55.31	0.83	0.36				
Review frequency of strategic means	6.013	7.410	75	3.833	2.256	18						4.68	1	86	0.03**
Revise frequency of strategic means	9.320	8.908	75	10.222	10.344	18	11.82	1	11.82	0.14	0.71				
Formulation of strategic ends	2.320	1.055	75	2.421	1.017	19	0.15	1	0.15	0.14	0.71				
Formulation of strategic means	2.880	1.115	75	2.778	1.060	18	0.15	1	0.15	0.12	0.73				
Importance of Strategic planning	6.280	0.966	75	6.158	1.119	19	0.23	1	0.23	0.23	0.63				

Appendix 40. Scores for small and large organizations in Finland, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.693	0.885	75	2.895	0.567	19						1.48	1	43	0.23
Short-term target-setting process. ends	1.987	0.966	75	2.000	1.054	19	0	1	0	0	0.96				
Short-term target-setting process. means	2.720	1.060	75	2.789	1.032	19	0.07	1	0.07	0.07	0.8				
Targeted performance in months	3.723	2.189	75	3.697	2.337	19	0.01	1	0.01	0	0.96				
Action plans in months	3.320	2.065	75	3.487	1.930	19	0.42	1	0.42	0.1	0.75				
Resource commitments in months	2.950	2.184	75	3.079	2.055	19	0.25	1	0.25	0.05	0.82				
Information about coordination	4.840	1.159	75	5.193	0.884	19	1.89	1	1.89	1.53	0.22				
Information about resource requirements	4.910	1.215	75	5.158	1.065	19	0.93	1	0.93	0.66	0.42				
Importance of Short-term Planning	6.200	0.870	75	5.842	1.385	19						1.15	1	22	0.29

Appendix 41. Scores for small and large organizations in Finland, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	2.573	1.629	75	2.842	1.573	19	1.1	1	1.1	0.42	0.52				
Control of CAPEX	2.865	1.853	74	3.000	1.826	19	0.28	1	0.28	0.08	0.78				
Diagnostic usage of budgets	4.841	1.469	75	4.719	1.423	19	0.22	1	0.22	0.1	0.75				
Interactive usage of budgets	4.520	1.388	75	4.316	1.367	19	0.63	1	0.63	0.33	0.57				
Diagnostic usage of PMs	5.415	1.496	75	5.412	1.647	19	0	1	0	0	0.99				
Interactive usage of PMs	4.840	1.544	75	4.716	1.591	19	0.23	1	0.23	0.1	0.76				
PE-financial measures	6.373	1.024	75	6.526	0.697	19	0.35	1	0.35	0.38	0.54				
PE-non-financial measures	5.160	1.603	75	4.947	1.840	19	0.69	1	0.69	0.25	0.62				
Number of performance measures	5.053	2.686	75	5.263	2.997	19	0.67	1	0.67	0.09	0.77				
PE for leadership performance	9.097	3.341	72	9.474	3.502	19	2.13	1	2.13	0.19	0.67				
PE for business performance	8.240	3.969	75	8.526	3.907	19	1.24	1	1.24	0.08	0.78				
Importance of performance measurement and evaluation	6.127	1.029	75	6.105	1.008	19	0.01	1	0.01	0.01	0.94				

Appendix 42. Scores for small and large organizations in Finland, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	2.187	0.940	75	2.368	0.684	19	0.5	1	0.5	0.62	0.43				
Number of non-financial measures	2.093	1.153	75	2.158	0.834	19	0.06	1	0.06	0.05	0.82				
Number of total measures	4.280	0.994	75	4.526	0.612	19						1.85	1	45	0.18
Usage of f & n-f measures	1.107	0.352	75	1.000	0.000	19						0	0	0	0.00**
Weight of financial measures	0.640	0.229	64	0.647	0.210	19	0	1	0	0.02	0.9				
Weight of non-financial measures	0.360	0.229	64	0.353	0.210	19	0	1	0	0.02	0.9				
Extent of financial rewarding	6.373	1.075	75	6.421	0.769	19	0.03	1	0.03	0.03	0.86				
Extent of non-financial rewarding	3.200	1.542	75	3.789	1.273	19	5.27	1	5.27	2.36	0.13				
Financial rewards committing	5.027	1.219	75	5.158	1.259	19	0.26	1	0.26	0.17	0.68				
Financial rewards motivating	5.360	1.301	75	5.579	1.216	19	0.73	1	0.73	0.44	0.51				
Financian rewards directing attention	5.760	1.344	75	5.947	0.848	19						0.57	1	44	0.46
Non-financial rewards committing	5.253	1.425	75	5.053	1.433	19	0.61	1	0.61	0.3	0.59				
Non-financial rewards motivating	5.533	1.166	75	5.632	1.116	19	0.15	1	0.15	0.11	0.74				
Non-financial rewads directing attention	4.800	1.577	75	4.684	1.493	19	0.2	1	0.2	0.08	0.77				
Average% of max. possibe bonus	20.900	7.493	75	23.842	6.644	19	131.22	1	131.22	2.44	0.12				
Importance of rewards and compensation	5.280	1.341	75	5.789	0.976	19	3.93	1	3.93	2.41	0.12				

Appendix 43. Scores for small and large organizations in Finland, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.873	1.445	75	4.184	1.701	19	1.47	1	1.47	0.65	0.42				
Frequency of management groups conveying in weeks	3.333	1.614	75	2.474	1.264	19	11.2	1	11.2	4.66	0.03**				
Influence on decisions	3.855	1.015	25	4.462	0.929	6	1.78	1	1.78	1.78	0.19				
Influence on expanding business	2.747	0.810	29	3.000	1.361	10	0.48	1	0.48	0.5	0.48				
Influence on personnel-related matters	3.645	1.343	62	4.188	1.465	16	3.74	1	3.74	2	0.16				
Formality of rules and procedures	3.540	0.960	42	3.400	1.086	10	0.16	1	0.16	0.16	0.69				
Stability of management groups	4.507	0.760	75	4.158	1.119	19	1.84	1	1.84	2.6	0.11				
Broadness of management groups	3.027	1.385	75	3.211	1.228	19	0.51	1	0.51	0.28	0.6				
Importance of Management Processes	5.853	1.182	75	6.211	0.713	19	1.93	1	1.93	1.58	0.21				
Importance of Organization Design	5.253	1.517	75	5.474	1.504	19	0.74	1	0.74	0.32	0.57				
Importance of Rules and Procedures	4.240	1.469	75	4.368	1.342	19	0.25	1	0.25	0.12	0.73				

Appendix 44. Scores for small and large organizations in Finland, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.133	1.256	75	5.105	1.286	19	0.01	1	0.01	0.01	0.93				
Job rotation	4.173	1.528	75	4.526	1.172	19	1.89	1	1.89	0.88	0.35				
Socialization	4.551	1.084	75	4.246	0.935	19	1.41	1	1.41	1.27	0.26				
Formality of mission statement	5.320	1.517	75	5.368	1.499	19	0.04	1	0.04	0.02	0.9				
Mission for guiding purposes	4.720	1.632	75	4.737	1.408	19	0	1	0	0	0.97				
Formality of vision statement	5.573	1.275	75	5.895	0.875	19						1.67	1	40	0.2
Vision for guiding purposes	4.693	1.568	75	5.053	1.393	19	1.96	1	1.96	0.83	0.36				
Importance of Culture and Values	5.907	1.141	75	5.737	0.991	19	0.44	1	0.44	0.35	0.55				

Appendix 45. Scores for small and large organizations in Germany, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.957	1.583	70	4.176	1.015	17	0.66	1	0.66	0.3	0.59				
Qualitative strategic ends	5.271	1.522	70	5.824	0.809	17						4.26	1	47	0.04**
Quantitative strategic ends	4.900	1.580	70	5.176	1.334	17	1.05	1	1.05	0.44	0.51				
Strategic ends specificity	4.500	1.366	70	5.314	1.031	17	9.06	1	9.06	5.28	0.02**				
Strategic means specificity	3.890	1.441	70	4.333	1.537	17	2.68	1	2.68	1.26	0.26				
Review frequency of strategic ends	7.362	4.194	69	8.000	4.514	17	5.55	1	5.55	0.31	0.58				
Revise frequency of strategic ends	10.594	6.182	69	15.529	10.777	17						3.3	1	19	0.09
Review frequency of strategic means	5.985	4.177	68	4.882	4.256	17	16.54	1	16.54	0.94	0.33				
Revise frequency of strategic means	8.000	4.299	68	7.353	5.894	17	5.69	1	5.69	0.26	0.61				
Formulation of strategic ends	2.232	0.926	69	2.588	1.004	17	1.73	1	1.73	1.96	0.17				
Formulation of strategic means	2.638	1.071	69	3.059	1.144	17	2.42	1	2.42	2.06	0.16				
Importance of Strategic planning	4.371	1.795	70	5.353	1.618	17	13.18	1	13.18	4.24	0.04**				

Appendix 46. Scores for small and large organizations in Germany, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.514	1.060	70	2.529	1.328	17	0	1	0	0	0.96				
Short-term target-setting process. ends	2.057	0.740	70	1.706	0.849	17	1.69	1	1.69	2.91	0.09				
Short-term target-setting process. means	2.586	0.909	70	2.765	1.200	17						0.33	1	21	0.57
Targeted performance in months	8.061	4.520	70	8.588	4.345	17	3.81	1	3.81	0.19	0.66				
Action plans in months	3.439	3.156	70	3.779	3.366	17	1.58	1	1.58	0.15	0.69				
Resource commitments in months	3.668	3.828	70	5.603	4.510	17	51.22	1	51.22	3.26	0.07				
Information about coordination	5.276	1.075	70	5.529	0.913	17	0.88	1	0.88	0.8	0.37				
Information about resource requirements	4.968	1.214	70	5.044	1.248	17	0.08	1	0.08	0.05	0.82				
Importance of Short-term Planning	5.657	1.153	70	5.941	0.899	17	1.1	1	1.1	0.9	0.35				

Appendix 47. Scores for small and large organizations in Germany, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	2.943	1.403	70	2.529	1.281	17	2.34	1	2.34	1.23	0.27				
Control of CAPEX	2.243	1.160	70	2.294	1.105	17	0.04	1	0.04	0.03	0.87				
Diagnostic usage of budgets	5.246	1.389	69	5.353	1.283	17	0.15	1	0.15	0.08	0.77				
Interactive usage of budgets	4.449	1.300	69	4.918	1.344	17	2.99	1	2.99	1.75	0.19				
Diagnostic usage of PMs	4.502	1.980	69	5.843	0.817	17						18.7	1	64	0.00**
Interactive usage of PMs	4.032	1.738	69	5.118	1.200	17	16.08	1	16.08	5.91	0.02**				
PE-financial measures	5.057	1.718	70	6.059	1.345	17	13.72	1	13.72	5.01	0.03**				
PE-non-financial measures	4.700	1.697	70	5.235	1.602	17	3.92	1	3.92	1.39	0.24				
Number of performance measures	3.915	1.934	65	5.853	2.149	17	50.59	1	50.59	12.92	0.00**				
PE for leadership performance	10.646	3.806	65	10.875	4.500	16	0.67	1	0.67	0.04	0.84				
PE for business performance	9.045	4.172	67	9.765	3.750	17	7.03	1	7.03	0.42	0.52				
Importance of performance measurement and evaluation	5.514	1.294	70	5.824	1.015	17	1.31	1	1.31	0.84	0.36				

Appendix 48. Scores for small and large organizations in Germany, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.429	1.111	70	1.765	0.903	17	1.55	1	1.55	1.34	0.25				
Number of non-financial measures	1.057	0.814	70	1.176	0.728	17	0.19	1	0.19	0.31	0.58				
Number of total measures	2.486	1.442	70	2.941	1.435	17	2.84	1	2.84	1.37	0.25				
Usage of f & n-f measures	1.492	0.753	65	1.235	0.562	17						2.42	1	33	0.13
Weight of financial measures	0.584	0.358	62	0.497	0.272	15						1.08	1	27	0.31
Weight of non-financial measures	0.416	0.358	62	0.503	0.272	15						1.08	1	27	0.31
Extent of financial rewarding	4.329	1.816	70	4.882	1.691	17	4.19	1	4.19	1.31	0.26				
Extent of non-financial rewarding	3.943	1.413	70	4.765	1.480	17	9.24	1	9.24	4.54	0.04**				
Financial rewards committing	4.829	1.769	70	5.000	1.061	17						0.27	1	41	0.61
Financial rewards motivating	4.686	1.716	70	5.059	0.966	17						1.44	1	44	0.24
Financian rewards directing attention	4.343	1.895	70	4.706	1.490	17	1.8	1	1.8	0.54	0.46				
Non-financial rewards committing	4.643	1.686	70	5.529	1.328	17	10.75	1	10.75	4.07	0.05**				
Non-financial rewards motivating	5.214	1.632	70	5.882	1.219	17						3.56	1	32	0.07
Non-financial rewads directing attention	4.429	1.806	70	5.471	1.586	17	14.85	1	14.85	4.76	0.03**				
Average% of max. possibe bonus	21.814	13.527	70	25.934	11.013	16	221.03	1	221.03	1.29	0.26				
Importance of rewards and compensation	4.871	1.503	70	5.353	1.169	17	3.17	1	3.17	1.52	0.22				

Appendix 49. Scores for small and large organizations in Germany, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.457	1.256	70	4.000	1.335	17	4.03	1	4.03	2.49	0.12				
Frequency of management groups conveying in weeks	2.314	2.184	70	2.235	1.393	17	0.09	1	0.09	0.02	0.89				
Influence on decisions	3.101	0.695	60	3.331	0.762	10	0.45	1	0.45	0.91	0.34				
Influence on expanding business	2.529	0.792	68	2.688	1.291	16	0.32	1	0.32	0.4	0.53				
Influence on personnel-related matters	2.841	0.964	69	2.902	1.019	17	0.05	1	0.05	0.05	0.82				
Formality of rules and procedures	2.617	0.980	67	3.000	1.089	16	1.9	1	1.9	1.89	0.17				
Stability of management groups	6.129	1.393	70	6.353	0.493	17	0.69	1	0.69	0.42	0.52				
Broadness of management groups	4.343	1.992	70	4.176	2.186	17	0.38	1	0.38	0.09	0.76				
Importance of Management Processes	5.143	1.158	70	6.059	0.899	17						12.57	1	30	0.00**
Importance of Organization Design	5.014	1.222	70	5.353	1.169	17	1.57	1	1.57	1.07	0.3				
Importance of Rules and Procedures	5.229	1.241	70	5.471	1.328	17	0.8	1	0.8	0.51	0.48				

Appendix 50. Scores for small and large organizations in Germany, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.000	1.465	70	5.294	1.160	17	1.18	1	1.18	0.59	0.44				
Job rotation	2.514	1.282	70	3.824	1.667	17	23.45	1	23.45	12.62	0.00**				
Socialization	4.129	1.157	70	4.686	0.989	17	4.25	1	4.25	3.35	0.07				
Formality of mission statement	4.600	1.860	70	6.118	0.857	17						24.85	1	56	0.00**
Mission for guiding purposes	4.714	1.229	70	5.118	1.409	17	2.23	1	2.23	1.39	0.24				
Formality of vision statement	4.371	1.712	70	5.647	0.996	17						16.23	1	42	0.00**
Vision for guiding purposes	4.200	1.584	70	5.118	1.576	17	11.52	1	11.52	4.6	0.03**				
Importance of Culture and Values	5.143	1.311	70	6.059	0.827	17	11.48	1	11.48	7.53	0.01**				

Appendix 51. Scores for small and large organizations in Italy, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.260	1.614	50	3.917	0.900	12	4.17	1	4.17	1.83	0.18				
Qualitative strategic ends	4.720	1.310	50	4.500	1.679	12	0.47	1	0.47	0.24	0.62				
Quantitative strategic ends	5.080	1.639	50	5.500	1.314	12	1.71	1	1.71	0.68	0.41				
Strategic ends specificity	4.527	1.335	49	4.556	1.380	12	0.01	1	0.01	0	0.95				
Strategic means specificity	4.408	1.519	49	4.273	1.263	11	0.16	1	0.16	0.08	0.78				
Review frequency of strategic ends	7.640	5.170	50	11.083	8.969	12	114.74	1	114.74	3.14	0.08				
Revise frequency of strategic ends	8.792	5.442	48	11.273	9.122	11	55.09	1	55.09	1.41	0.24				
Review frequency of strategic means	7.245	5.286	49	11.818	9.020	11	187.89	1	187.89	5.06	0.03**				
Revise frequency of strategic means	7.979	5.451	47	11.167	8.892	12	97.15	1	97.15	2.48	0.12				
Formulation of strategic ends	2.100	0.416	50	2.333	0.888	12						0.79	1	12	0.39
Formulation of strategic means	2.440	0.787	50	2.545	1.036	11	0.1	1	0.1	0.14	0.71				
Importance of Strategic planning	4.854	1.399	48	4.000	1.706	12	7	1	7	3.28	0.08				

Appendix 52. Scores for small and large organizations in Italy, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	1.840	0.618	50	2.083	0.793	12	0.57	1	0.57	1.34	0.25				
Short-term target-setting process. ends	1.714	0.707	49	1.667	0.651	12	0.02	1	0.02	0.04	0.83				
Short-term target-setting process. means	2.100	0.995	50	2.083	0.793	12	0	1	0	0	0.96				
Targeted performance in months	4.770	3.996	50	4.750	3.720	12	0	1	0	0	0.99				
Action plans in months	4.140	3.723	50	4.688	3.648	12	2.9	1	2.9	0.21	0.65				
Resource commitments in months	4.285	4.158	50	5.500	4.079	12	14.29	1	14.29	0.83	0.37				
Information about coordination	5.240	0.894	50	4.639	1.432	12	3.5	1	3.5	3.4	0.07				
Information about resource requirements	5.000	0.960	50	4.750	1.297	12	0.6	1	0.6	0.57	0.45				
Importance of Short-term Planning	5.653	1.217	49	5.182	1.940	11						0.6	1	12	0.46

Appendix 53. Scores for small and large organizations in Italy, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	2.720	1.429	50	2.917	1.443	12	0.37	1	0.37	0.18	0.67				
Control of CAPEX	2.620	1.627	50	1.833	0.577	12						7.66	1	51	0.01**
Diagnostic usage of budgets	4.513	1.927	50	4.944	1.693	12	1.8	1	1.8	0.51	0.48				
Interactive usage of budgets	3.588	1.695	50	3.850	1.322	12	0.66	1	0.66	0.25	0.62				
Diagnostic usage of PMs	4.127	2.184	50	4.417	2.216	12	0.81	1	0.81	0.17	0.68				
Interactive usage of PMs	3.144	1.757	50	3.783	1.931	12	3.96	1	3.96	1.23	0.27				
PE-financial measures	4.900	1.776	50	5.833	0.835	12						7.19	1	38	0.01**
PE-non-financial measures	4.592	1.682	49	3.917	1.379	12	4.39	1	4.39	1.65	0.2				
Number of performance measures	4.083	1.442	36	4.444	1.014	9	0.94	1	0.94	0.5	0.48				
PE for leadership performance	11.533	4.911	45	13.750	6.824	12	46.55	1	46.55	1.63	0.21				
PE for business performance	9.426	5.811	47	7.083	4.542	12	52.44	1	52.44	1.68	0.2				
Importance of performance measurement and evaluation	5.250	1.296	48	5.000	1.706	12	0.6	1	0.6	0.31	0.58				

Appendix 54. Scores for small and large organizations in Italy, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.220	1.447	50	2.667	0.985	12	20.25	1	20.25	10.73	0.00**				
Number of non-financial measures	1.380	1.383	50	1.167	0.718	12						0.56	1	33	0.46
Number of total measures	2.600	1.773	50	3.833	1.115	12						9.14	1	26	0.01**
Usage of f & n-f measures	1.750	0.899	40	1.167	0.389	12						10.37	1	43	0.00**
Weight of financial measures	0.497	0.396	38	0.736	0.169	11						8.52	1	40	0.01**
Weight of non-financial measures	0.503	0.396	38	0.264	0.169	11						8.52	1	40	0.01**
Extent of financial rewarding	5.667	1.548	48	5.833	1.337	12	0.27	1	0.27	0.12	0.73				
Extent of non-financial rewarding	2.979	1.768	48	3.167	1.946	12	0.34	1	0.34	0.1	0.75				
Financial rewards committing	5.085	1.442	47	4.500	1.624	12	3.27	1	3.27	1.5	0.23				
Financial rewards motivating	5.574	1.395	47	5.000	1.651	12	3.15	1	3.15	1.5	0.22				
Financian rewards directing attention	4.787	1.601	47	5.000	2.045	12	0.43	1	0.43	0.15	0.7				
Non-financial rewards committing	4.826	1.924	46	5.000	2.160	10	0.25	1	0.25	0.06	0.8				
Non-financial rewards motivating	4.957	1.825	46	4.600	1.897	10	1.04	1	1.04	0.31	0.58				
Non-financial rewads directing attention	4.239	1.888	46	4.600	1.713	10	1.07	1	1.07	0.31	0.58				
Average% of max. possibe bonus	15.489	9.608	45	23.750	9.741	12	646.54	1	646.54	6.96	0.01**				
Importance of rewards and compensation	5.196	1.392	46	5.417	1.240	12	0.46	1	0.46	0.25	0.62				

Appendix 55. Scores for small and large organizations in Italy, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.388	1.255	49	3.292	1.671	12	0.09	1	0.09	0.05	0.82				
Frequency of management groups conveying in weeks	2.500	2.727	50	2.250	1.545	12	0.6	1	0.6	0.09	0.76				
Influence on decisions	2.911	1.024	37	2.972	0.795	11	0.03	1	0.03	0.03	0.86				
Influence on expanding business	2.311	1.169	45	2.583	0.866	12	0.7	1	0.7	0.57	0.46				
Influence on personnel-related matters	2.709	0.992	47	2.444	1.140	12						0.54	1	16	0.47
Formality of rules and procedures	2.545	1.302	44	2.694	0.915	12	0.21	1	0.21	0.14	0.71				
Stability of management groups	5.500	1.374	50	4.833	1.749	12	4.3	1	4.3	2.05	0.16				
Broadness of management groups	3.940	1.463	50	4.000	1.414	12	0.03	1	0.03	0.02	0.9				
Importance of Management Processes	5.140	1.552	50	4.417	1.881	12	5.06	1	5.06	1.94	0.17				
Importance of Organization Design	5.220	1.217	50	4.000	1.348	12	14.4	1	14.4	9.33	0.00**				
Importance of Rules and Procedures	5.180	1.240	50	4.667	1.723	12	2.55	1	2.55	1.42	0.24				

Appendix 56. Scores for small and large organizations in Italy, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.080	1.353	50	5.000	0.853	12	0.06	1	0.06	0.04	0.85				
Job rotation	3.660	1.649	50	3.667	1.231	12	0	1	0	0	0.99				
Socialization	3.585	1.471	49	3.394	1.583	11	0.33	1	0.33	0.15	0.7				
Formality of mission statement	3.980	1.911	50	4.083	2.234	12	0.1	1	0.1	0.03	0.87				
Mission for guiding purposes	4.260	1.601	50	4.167	1.749	12	0.08	1	0.08	0.03	0.86				
Formality of vision statement	4.060	1.878	50	3.667	2.015	12	1.5	1	1.5	0.41	0.52				
Vision for guiding purposes	4.160	1.765	50	3.917	1.676	12	0.57	1	0.57	0.19	0.67				
Importance of Culture and Values	5.306	1.517	49	4.333	1.497	12	9.12	1	9.12	3.98	0.05**				

Appendix 57. Scores for small and large organizations in Norway, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.943	1.680	53	5.000	1.468	14	12.36	1	12.36	4.6	0.04**				
Qualitative strategic ends	4.868	1.316	53	5.571	0.756	14	5.48	1	5.48	3.65	0.06				
Quantitative strategic ends	5.623	1.333	53	5.500	1.557	14	0.17	1	0.17	0.09	0.77				
Strategic ends specificity	4.811	1.137	53	4.690	0.938	14	0.16	1	0.16	0.13	0.72				
Strategic means specificity	4.327	1.358	53	4.048	1.320	14	0.86	1	0.86	0.47	0.49				
Review frequency of strategic ends	7.396	6.752	53	5.714	5.045	14	31.33	1	31.33	0.75	0.39				
Revise frequency of strategic ends	10.453	7.428	53	9.857	6.347	14	3.93	1	3.93	0.08	0.78				
Review frequency of strategic means	6.327	7.186	52	4.786	4.228	14	26.2	1	26.2	0.59	0.45				
Revise frequency of strategic means	8.346	6.967	52	7.071	5.166	14	17.92	1	17.92	0.41	0.53				
Formulation of strategic ends	1.827	1.232	52	1.357	1.082	14	2.43	1	2.43	1.68	0.2				
Formulation of strategic means	2.769	1.165	52	3.231	1.363	13	2.22	1	2.22	1.52	0.22				
Importance of Strategic planning	5.113	1.476	53	5.214	1.251	14	0.11	1	0.11	0.06	0.82				

Appendix 58. Scores for small and large organizations in Norway, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.192	1.011	52	2.286	1.267	14	0.1	1	0.1	0.08	0.77				
Short-term target-setting process. ends	2.075	0.978	53	2.000	0.679	14	0.06	1	0.06	0.07	0.79				
Short-term target-setting process. means	2.604	1.115	53	2.929	1.328	14	1.17	1	1.17	0.87	0.36				
Targeted performance in months	7.712	4.918	53	8.232	4.758	14	2.99	1	2.99	0.13	0.72				
Action plans in months	4.572	4.292	52	6.054	4.924	14	24.21	1	24.21	1.23	0.27				
Resource commitments in months	2.837	3.301	52	2.911	3.977	14	0.06	1	0.06	0.01	0.94				
Information about coordination	5.019	0.997	53	5.214	0.791	14	0.42	1	0.42	0.46	0.5				
Information about resource requirements	4.715	0.935	53	4.786	1.082	14	0.05	1	0.05	0.06	0.81				
Importance of Short-term Planning	5.453	1.084	53	5.500	0.650	14	0.02	1	0.02	0.02	0.88				

Appendix 59. Scores for small and large organizations in Norway, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	2.377	1.457	53	2.786	1.528	14	1.85	1	1.85	0.85	0.36				
Control of CAPEX	2.434	1.599	53	2.214	1.051	14	0.53	1	0.53	0.24	0.63				
Diagnostic usage of budgets	5.170	1.447	53	5.095	2.036	14	0.06	1	0.06	0.02	0.88				
Interactive usage of budgets	4.214	1.153	53	4.057	1.824	14						0.09	1	16	0.76
Diagnostic usage of PMs	4.532	1.990	52	4.381	2.275	14	0.25	1	0.25	0.06	0.81				
Interactive usage of PMs	3.894	1.740	52	3.600	1.958	14	0.95	1	0.95	0.3	0.59				
PE-financial measures	4.925	1.999	53	5.143	1.703	14	0.53	1	0.53	0.14	0.71				
PE-non-financial measures	5.208	1.321	53	5.571	0.756	14	1.47	1	1.47	0.97	0.33				
Number of performance measures	5.580	3.333	50	6.071	2.464	14	2.64	1	2.64	0.26	0.61				
PE for leadership performance	8.511	4.170	45	7.769	4.304	13	5.55	1	5.55	0.31	0.58				
PE for business performance	4.543	4.540	46	4.538	4.371	13	0	1	0	0	1				
Importance of performance measurement and evaluation	5.604	1.025	53	5.286	1.490	14	1.12	1	1.12	0.87	0.35				

Appendix 60. Scores for small and large organizations in Norway, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.132	1.127	53	0.929	1.072	14	0.46	1	0.46	0.37	0.55				
Number of non-financial measures	0.792	1.081	53	1.214	1.528	14	1.97	1	1.97	1.41	0.24				
Number of total measures	1.925	1.697	53	2.143	2.107	14	0.53	1	0.53	0.17	0.69				
Usage of f & n-f measures	1.658	0.708	38	1.556	0.882	9	0.08	1	0.08	0.14	0.71				
Weight of financial measures	0.698	0.328	37	0.536	0.397	9	0.19	1	0.19	1.64	0.21				
Weight of non-financial measures	0.302	0.329	37	0.464	0.397	9	0.19	1	0.19	1.64	0.21				
Extent of financial rewarding	5.547	1.897	53	5.286	2.091	14	0.76	1	0.76	0.2	0.65				
Extent of non-financial rewarding	3.679	1.638	53	4.143	1.406	14	2.38	1	2.38	0.94	0.34				
Financial rewards committing	3.769	1.822	52	4.429	2.027	14	4.8	1	4.8	1.38	0.24				
Financial rewards motivating	4.788	1.903	52	4.500	1.454	14	0.92	1	0.92	0.28	0.6				
Financian rewards directing attention	4.481	1.863	52	4.786	2.007	14	1.03	1	1.03	0.29	0.59				
Non-financial rewards committing	3.904	1.648	52	3.857	1.748	14	0.02	1	0.02	0.01	0.93				
Non-financial rewards motivating	4.788	1.576	52	5.071	1.542	14	0.88	1	0.88	0.36	0.55				
Non-financial rewads directing attention	4.577	1.486	52	4.357	1.865	14	0.53	1	0.53	0.22	0.64				
Average% of max. possibe bonus	15.292	12.298	52	12.369	12.587	13	88.86	1	88.86	0.58	0.45				
Importance of rewards and compensation	4.774	1.339	53	4.500	1.787	14	0.83	1	0.83	0.4	0.53				

Appendix 61. Scores for small and large organizations in Norway, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.472	1.360	53	4.464	1.322	14	10.91	1	10.91	5.96	0.02				
Frequency of management groups conveying in weeks	2.519	1.985	52	2.071	2.018	14	2.21	1	2.21	0.56	0.46				
Influence on decisions	3.035	0.633	37	3.470	0.667	9	1.37	1	1.37	3.34	0.07				
Influence on expanding business	2.173	0.704	50	2.524	0.701	14	1.34	1	1.34	2.72	0.1				
Influence on personnel-related matters	3.378	0.981	52	3.513	1.085	13	0.19	1	0.19	0.19	0.67				
Formality of rules and procedures	2.543	0.972	46	2.972	1.049	12	1.75	1	1.75	1.79	0.19				
Stability of management groups	6.250	0.883	52	5.571	1.222	14	5.08	1	5.08	5.49	0.02**				
Broadness of management groups	4.250	1.888	52	4.214	2.119	14	0.01	1	0.01	0	0.95				
Importance of Management Processes	5.377	1.197	53	5.786	1.051	14	1.85	1	1.85	1.35	0.25				
Importance of Organization Design	5.660	0.876	53	5.500	0.760	14	0.28	1	0.28	0.39	0.53				
Importance of Rules and Procedures	4.811	1.287	53	5.357	0.929	14	3.3	1	3.3	2.2	0.14				

Appendix 62. Scores for small and large organizations in Norway, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.038	1.073	53	5.286	1.139	14	0.68	1	0.68	0.58	0.45				
Job rotation	3.679	1.397	53	4.286	1.383	14	4.07	1	4.07	2.09	0.15				
Socialization	4.415	1.015	53	4.571	1.243	14	0.27	1	0.27	0.24	0.63				
Formality of mission statement	6.170	1.172	53	6.643	0.497	14	2.48	1	2.48	2.16	0.15				
Mission for guiding purposes	4.415	1.292	53	4.500	1.225	14	0.08	1	0.08	0.05	0.83				
Formality of vision statement	5.679	1.370	53	5.929	0.997	14	0.69	1	0.69	0.41	0.53				
Vision for guiding purposes	4.208	1.472	53	4.714	1.204	14	2.84	1	2.84	1.4	0.24				
Importance of Culture and Values	5.849	0.907	53	6.000	0.784	14	0.25	1	0.25	0.32	0.57				

Appendix 63. Scores for small and large organizations in Poland, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	4.605	2.248	43	5.000	2.082	7	0.94	1	0.94	0.19	0.67				
Qualitative strategic ends	5.372	1.363	43	5.571	0.787	7	0.24	1	0.24	0.14	0.71				
Quantitative strategic ends	5.163	1.430	43	6.429	0.787	7	9.65	1	9.65	5.17	0.03**				
Strategic ends specificity	5.318	1.236	43	5.667	0.981	7	0.73	1	0.73	0.5	0.48				
Strategic means specificity	4.860	1.571	43	5.333	1.610	7	1.35	1	1.35	0.54	0.47				
Review frequency of strategic ends	5.140	4.132	43	3.143	4.018	7	24	1	24	1.42	0.24				
Revise frequency of strategic ends	10.140	7.633	43	9.000	7.141	7	7.82	1	7.82	0.14	0.71				
Review frequency of strategic means	5.349	4.815	43	2.143	1.069	7						14.63	1	43	0.00**
Revise frequency of strategic means	9.163	7.801	43	8.143	3.761	7	6.26	1	6.26	0.11	0.74				
Formulation of strategic ends	2.093	1.019	43	1.286	0.488	7	3.92	1	3.92	4.18	0.05**				
Formulation of strategic means	2.326	1.107	43	2.143	1.574	7	0.2	1	0.2	0.15	0.7				
Importance of Strategic planning	5.070	1.163	43	5.429	0.535	7	0.78	1	0.78	0.64	0.43				

Appendix 64. Scores for small and large organizations in Poland, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.233	0.922	43	2.143	0.378	7						0.2	1	20	0.66
Short-term target-setting process. ends	2.186	1.006	43	2.000	1.000	7	0.21	1	0.21	0.21	0.65				
Short-term target-setting process. means	2.535	1.120	43	2.143	0.900	7						1.06	1	9	0.33
Targeted performance in months	3.733	4.133	43	2.464	4.214	7	9.68	1	9.68	0.56	0.46				
Action plans in months	3.337	3.699	43	1.786	2.074	7	14.49	1	14.49	1.16	0.29				
Resource commitments in months	2.395	2.820	43	1.250	1.242	7	7.9	1	7.9	1.1	0.3				
Information about coordination	4.992	1.128	43	4.905	0.659	7	0.05	1	0.05	0.04	0.84				
Information about resource requirements	5.169	0.998	43	4.821	1.188	7	0.73	1	0.73	0.69	0.41				
Importance of Short-term Planning	5.558	1.278	43	5.429	0.535	7	0.1	1	0.1	0.07	0.79				

Appendix 65. Scores for small and large organizations in Poland, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	3.256	1.382	43	3.286	2.138	7						0	1	7	0.97
Control of CAPEX	2.605	1.450	43	1.714	0.488	7						9.56	1	28	0.00**
Diagnostic usage of budgets	4.969	1.629	43	6.000	1.000	7	6.4	1	6.4	2.61	0.11				
Interactive usage of budgets	4.507	1.515	43	5.343	1.147	7	4.21	1	4.21	1.94	0.17				
Diagnostic usage of PMs	5.442	1.230	43	6.048	1.268	7	2.21	1	2.21	1.45	0.23				
Interactive usage of PMs	4.944	1.218	43	5.657	1.198	7	3.06	1	3.06	2.07	0.16				
PE-financial measures	5.767	1.250	43	7.000	0.000	7						0	0	0	0.00**
PE-non-financial measures	4.907	1.394	43	4.000	1.000	7	4.95	1	4.95	2.71	0.11				
Number of performance measures	5.786	6.022	42	5.571	4.237	7	0.28	1	0.28	0.01	0.93				
PE for leadership performance	9.135	4.577	37	7.429	4.614	7	17.14	1	17.14	0.82	0.37				
PE for business performance	5.548	5.320	42	3.857	4.018	7	17.15	1	17.15	0.64	0.43				
Importance of performance measurement and evaluation	5.442	1.221	43	6.000	0.816	7	1.88	1	1.88	1.35	0.25				

Appendix 66. Scores for small and large organizations in Poland, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.535	1.386	43	2.286	1.799	7	3.39	1	3.39	1.63	0.21				
Number of non-financial measures	1.674	1.085	43	1.000	1.000	7	2.74	1	2.74	2.37	0.13				
Number of total measures	3.209	1.684	43	3.286	1.604	7	0.04	1	0.04	0.01	0.91				
Usage of f & n-f measures	1.512	0.798	43	1.429	0.535	7	0.04	1	0.04	0.07	0.79				
Weight of financial measures	0.537	0.346	43	0.791	0.268	7	0.39	1	0.39	3.44	0.07				
Weight of non-financial measures	0.463	0.346	43	0.209	0.268	7	0.39	1	0.39	3.44	0.07				
Extent of financial rewarding	5.814	1.029	43	6.857	0.378	7						24.15	1	24	0.00**
Extent of non-financial rewarding	3.930	1.404	43	4.286	2.138	7	0.76	1	0.76	0.33	0.57				
Financial rewards committing	5.442	1.181	43	6.571	0.535	7	7.68	1	7.68	6.11	0.02**				
Financial rewards motivating	5.465	1.008	43	5.571	1.134	7	0.07	1	0.07	0.06	0.8				
Financian rewards directing attention	4.907	1.411	43	6.143	0.690	7						13.36	1	16	0.00**
Non-financial rewards committing	4.395	1.650	43	5.143	2.116	7	3.36	1	3.36	1.14	0.29				
Non-financial rewards motivating	4.442	1.736	43	5.143	1.952	7	2.96	1	2.96	0.95	0.33				
Non-financial rewads directing attention	4.209	1.767	43	5.286	2.215	7	6.98	1	6.98	2.09	0.16				
Average% of max. possibe bonus	25.942	19.355	43	34.429	24.885	7	433.59	1	433.59	1.07	0.31				
Importance of rewards and compensation	5.302	1.081	43	6.714	0.488	7	12	1	12	11.41	0.00**				

Appendix 67. Scores for small and large organizations in Poland, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.116	1.318	43	3.500	1.581	7	0.89	1	0.89	0.48	0.49				
Frequency of management groups conveying in weeks	2.721	2.881	43	2.571	1.397	7	0.13	1	0.13	0.02	0.89				
Influence on decisions	3.201	0.732	39	3.410	0.530	6	0.23	1	0.23	0.45	0.51				
Influence on expanding business	2.667	0.993	42	2.524	0.813	7	0.12	1	0.12	0.13	0.72				
Influence on personnel-related matters	3.140	1.014	43	3.619	1.162	7	1.38	1	1.38	1.3	0.26				
Formality of rules and procedures	2.722	0.820	42	2.857	0.573	7	0.11	1	0.11	0.17	0.68				
Stability of management groups	5.767	1.269	43	5.571	1.272	7	0.23	1	0.23	0.14	0.71				
Broadness of management groups	4.302	1.536	43	3.714	2.059	7	2.08	1	2.08	0.8	0.37				
Importance of Management Processes	5.302	1.013	43	6.143	1.069	7	4.25	1	4.25	4.09	0.05				
Importance of Organization Design	5.163	1.174	43	5.000	1.633	7	0.16	1	0.16	0.1	0.75				
Importance of Rules and Procedures	5.442	1.098	43	5.857	1.215	7	1.04	1	1.04	0.84	0.36				

Appendix 68. Scores for small and large organizations in Poland, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	5.302	1.206	43	5.857	0.690	7	1.85	1	1.85	1.39	0.24				
Job rotation	4.721	1.403	43	5.286	1.254	7	1.92	1	1.92	1	0.32				
Socialization	4.271	0.987	43	4.429	1.101	7	0.15	1	0.15	0.15	0.7				
Formality of mission statement	4.744	1.774	43	5.571	1.618	7	4.12	1	4.12	1.34	0.25				
Mission for guiding purposes	5.163	1.233	43	5.857	1.574	7	2.9	1	2.9	1.77	0.19				
Formality of vision statement	5.209	1.753	43	6.286	0.951	7	6.98	1	6.98	2.49	0.12				
Vision for guiding purposes	5.279	1.351	43	6.286	1.254	7	6.1	1	6.1	3.4	0.07				
Importance of Culture and Values	5.349	1.152	43	5.571	0.535	7						0.69	1	17	0.42

Appendix 69. Scores for small and large organizations in Sweden, Section A

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Strategic planning period	3.467	1.376	90	3.542	1.062	24	0.11	1	0.11	0.06	0.8				
Qualitative strategic ends	5.137	1.478	95	5.208	1.560	24	0.1	1	0.1	0.04	0.83				
Quantitative strategic ends	5.415	1.432	94	5.375	1.439	24	0.03	1	0.03	0.01	0.9				
Strategic ends specificity	4.442	1.068	95	4.958	1.046	24	5.11	1	5.11	4.51	0.04**				
Strategic means specificity	3.944	1.365	95	4.278	1.029	24	2.14	1	2.14	1.25	0.27				
Review frequency of strategic ends	5.915	4.722	94	7.125	7.321	24	28	1	28	0.98	0.32				
Revise frequency of strategic ends	10.466	7.168	88	11.864	6.999	22	34.38	1	34.38	0.68	0.41				
Review frequency of strategic means	6.539	5.021	89	8.208	8.288	24						0.89	1	28	0.35
Revise frequency of strategic means	9.395	7.239	86	9.591	5.179	22	0.67	1	0.67	0.01	0.91				
Formulation of strategic ends	1.904	1.038	94	2.000	1.000	23	0.17	1	0.17	0.16	0.69				
Formulation of strategic means	2.087	0.991	92	2.417	1.349	24						1.26	1	30	0.27
Importance of Strategic planning	5.723	1.290	94	5.583	1.381	24	0.38	1	0.38	0.22	0.64				

Appendix 70. Scores for small and large organizations in Sweden, Section B

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Translation of strategy into short-term plans	2.362	1.163	94	2.583	1.018	24	0.94	1	0.94	0.73	0.4				
Short-term target-setting process. ends	2.043	0.926	94	2.042	0.806	24	0	1	0	0	1				
Short-term target-setting process. means	2.478	1.124	92	2.750	1.113	24	1.41	1	1.41	1.12	0.29				
Targeted performance in months	5.324	4.580	95	5.271	5.028	24	0.05	1	0.05	0	0.96				
Action plans in months	4.614	4.361	94	3.469	3.633	24						1.74	1	42	0.19
Resource commitments in months	4.228	4.407	92	3.094	3.681	24						1.66	1	42	0.2
Information about coordination	5.182	1.030	95	5.306	0.983	24	0.29	1	0.29	0.28	0.6				
Information about resource requirements	5.045	1.065	95	5.281	0.805	24	1.07	1	1.07	1.03	0.31				
Importance of Short-term Planning	5.511	1.216	94	6.000	0.722	24						6.39	1	60	0.01**

Appendix 71. Scores for small and large organizations in Sweden, Section C

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Control of OPEX	3.160	1.568	94	2.652	1.465	23	4.76	1	4.76	1.98	0.16				
Control of CAPEX	3.075	1.777	93	3.458	1.978	24	2.8	1	2.8	0.85	0.36				
Diagnostic usage of budgets	5.465	1.136	94	5.389	1.006	24	0.11	1	0.11	0.09	0.77				
Interactive usage of budgets	4.396	1.192	94	4.583	1.176	24	0.67	1	0.67	0.48	0.49				
Diagnostic usage of PMs	5.109	1.893	93	5.514	1.441	24	3.12	1	3.12	0.95	0.33				
Interactive usage of PMs	4.211	1.602	93	4.892	1.370	24	8.83	1	8.83	3.64	0.06				
PE-financial measures	5.421	1.555	95	5.875	1.191	24	3.95	1	3.95	1.78	0.18				
PE-non-financial measures	5.095	1.337	95	5.042	1.574	24	0.05	1	0.05	0.03	0.87				
Number of performance measures	4.716	2.411	88	7.826	5.532	23						6.93	1	24	0.01**
PE for leadership performance	8.720	4.478	93	8.652	3.700	23	0.09	1	0.09	0	0.95				
PE for business performance	5.108	3.988	93	7.217	4.431	23	82.08	1	82.08	4.94	0.03**				
Importance of performance measurement and evaluation	5.811	1.205	95	5.958	0.999	24	0.42	1	0.42	0.31	0.58				

Appendix 72. Scores for small and large organizations in Sweden, Section D

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Number of financial measures	1.274	1.046	95	1.625	1.135	24	2.36	1	2.36	2.09	0.15				
Number of non-financial measures	1.211	1.436	95	1.458	1.532	24	1.18	1	1.18	0.56	0.46				
Number of total measures	2.484	1.649	95	3.083	1.666	24	6.88	1	6.88	2.52	0.12				
Usage of f & n-f measures	1.551	0.696	78	1.500	0.673	22	0.05	1	0.05	0.09	0.76				
Weight of financial measures	0.658	0.347	69	0.695	0.308	20	0.02	1	0.02	0.18	0.67				
Weight of non-financial measures	0.342	0.347	69	0.305	0.308	20	0.02	1	0.02	0.18	0.67				
Extent of financial rewarding	5.168	2.186	95	5.833	1.736	24	8.47	1	8.47	1.91	0.17				
Extent of non-financial rewarding	3.053	1.744	94	3.125	1.752	24	0.1	1	0.1	0.03	0.86				
Financial rewards committing	4.537	1.873	95	5.208	1.250	24						4.42	1	52	0.04**
Financial rewards motivating	4.653	1.779	95	4.958	1.628	24	1.79	1	1.79	0.58	0.45				
Financian rewards directing attention	4.832	1.826	95	4.708	1.829	24	0.29	1	0.29	0.09	0.77				
Non-financial rewards committing	4.447	1.916	94	4.174	1.922	23	1.38	1	1.38	0.37	0.54				
Non-financial rewards motivating	4.564	1.823	94	4.435	1.854	23	0.31	1	0.31	0.09	0.76				
Non-financial rewads directing attention	4.479	1.876	94	4.000	1.859	23	4.23	1	4.23	1.21	0.27				
Average% of max. possibe bonus	15.290	13.935	93	24.682	20.238	22	1569.2	1	1569.2	6.7	0.01**				
Importance of rewards and compensation	4.821	1.578	95	5.375	1.408	24	5.88	1	5.88	2.46	0.12				

Appendix 73. Scores for small and large organizations in Sweden, Section E

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Versatility of roles	3.816	1.468	95	3.521	1.128	24	1.67	1	1.67	0.84	0.36				
Frequency of management groups conveying in weeks	2.915	2.430	94	3.125	1.941	24	0.84	1	0.84	0.15	0.7				
Influence on decisions	3.446	0.771	56	4.095	1.146	17	5.49	1	5.49	7.25	0.01				
Influence on expanding business	3.044	1.003	75	3.492	0.998	21	3.29	1	3.29	3.27	0.07**				
Influence on personnel-related matters	3.333	1.187	82	3.773	1.517	22	3.35	1	3.35	2.1	0.15				
Formality of rules and procedures	2.955	0.905	74	3.803	1.162	22						9.92	1	29	0.00**
Stability of management groups	4.426	0.755	94	4.375	0.970	24	0.05	1	0.05	0.08	0.78				
Broadness of management groups	3.287	1.373	94	3.333	0.963	24	0.04	1	0.04	0.02	0.88				
Importance of Management Processes	5.400	1.267	95	5.167	1.274	24	1.04	1	1.04	0.65	0.42				
Importance of Organization Design	5.695	1.140	95	5.583	0.830	24	0.24	1	0.24	0.2	0.65				
Importance of Rules and Procedures	4.811	1.339	95	4.958	0.908	24	0.42	1	0.42	0.26	0.61				

Appendix 74. Scores for small and large organizations in Sweden, Section F

Construct	Number of Employees						Statistical test								
	0-1999			>2000			ANOVA					Welch's			
	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Sum of Squares	df	Mean Square	F	Sig.	Statistic[a]	df1	df2	Sig.
Promotions	4.853	1.167	95	5.000	1.103	24	0.42	1	0.42	0.31	0.58				
Job rotation	3.747	1.571	95	4.750	1.152	24						12.38	1	47	0.00**
Socialization	4.453	1.075	95	5.125	0.982	24	8.66	1	8.66	7.75	0.01**				
Formality of mission statement	5.242	1.583	95	5.583	1.248	24	2.23	1	2.23	0.96	0.33				
Mission for guiding purposes	3.926	1.619	95	4.333	1.633	24	3.17	1	3.17	1.21	0.27				
Formality of vision statement	4.958	1.675	95	5.375	1.173	24	3.33	1	3.33	1.32	0.25				
Vision for guiding purposes	4.316	1.586	95	4.625	1.439	24	1.83	1	1.83	0.75	0.39				
Importance of Culture and Values	5.779	1.064	95	6.000	0.834	24	0.94	1	0.94	0.9	0.35				